ITEM # <u>50</u> DATE: 06-26-12

COUNCIL ACTION FORM

SUBJECT: 2012/13 PROPERTY INSURANCE COVERAGE

BACKGROUND:

The insurance policy for the City's property (building and contents) coverage expires on June 30, 2012. FM Global has provided this coverage to the City since 2005.

This is not the usual renewal of an existing policy. The expiring policy proposal was accompanied by a warning letter from FM Global that they would not offer us a renewal beyond the 2012-13 policy year unless major capital improvements were made at the Power Plant. This warning stemmed from ongoing disagreements between their loss control engineers and our Electric Production management concerning prioritizing capital improvements for what they considered critical to loss prevention.

Because we faced the prospect of non-renewal by the incumbent, who is the only large commercial property insurer who sells insurance on a direct basis, staff advised the Council that it would be advisable to conduct an RFQ/RFP process to select an insurance broker. Procuring the services of a broker would allow the City to access other large commercial insurers beyond the incumbent carrier. On April 10, 2012, Council approved an agreement with Willis of Illinois for these broker services.

On May 15 and 16, five engineering representatives from potential quoting insurers, two engineers from Willis, and the City's Risk Manager spent two days conducting risk assessments at the Power Plant and Gas Turbine sites. These on-site inspections, plus several gigabytes of electronic files, were provided by Electric Services staff to provide sufficient information for their underwriters to determine interest in and pricing for the Ames property account.

Between May 16 and the June 19 Council work session, the Risk Manager and Willis were actively engaged in negotiations of the pricing, terms and conditions of the quotes represented by Options A, B, C and D. Those options were provided to Council at the June 19 work session, and are now being presented for Council's decision.

Follow-up Questions and Information from June 19 Council Work Session

The following slides were updated following the Council's recent work session:

#14 to show the corrected location of the Intermodal Facility, which is being communicated to the broker.

#17 to add a comment that the vehicle list represents concentrations of vehicles at various departments, and is not the entire list of City-owned vehicles.

#20 to correct the 2012-13 Account Rate entry for FM Global. The previous entry of \$.1488 was corrected because the TRIA (Federally defined terrorism premium) was inadvertently left out of the calculation. The corrected rate is \$.1607.

#26 to revise the orange bars depicting the \$5.0 Million Excess Flood Layer included with the Chubb Muni coverage.

#27 to insert the \$350,000 Deductible in the "Option C & D" Column for the Unit #8 Turbine/ Generator

#28 is a new table depicting Account Rates for the various Options. Account Rate is the Premium divided by the Total Insured Values (TIV) the insurer is exposed to. The Premiums shown in blue font are cross-referenced to the corresponding slide numbers that show the coverage diagrams.

#29 is a new slide showing how the different deductibles would be calculated for each Option. A handout will be provided to show detailed calculations of how the Limits and Deductibles could yield a net claim amount in the event of a tornado loss scenario that was shown in the slides and discussed at the work session.

Insured Values: Financing the Appropriate Amount of Risk

At the June 19 work session, information was discussed regarding the process professional risk managers utilize in the identification, quantification and prioritization of risk. Risks that cannot be eliminated or controlled, that can have a material effect on the financial health of an organization, should be dealt with by selecting a combination of <u>both</u> risk mitigation and risk financing techniques.

The City's options for insurance risk financing is limited by real world factors such as the relatively small size and older age of our power generation facilities and the proximity of other facilities to high risk flood zones. Given these limitations, we were unable to provide an exact match to the incumbent insurer's insurance policy limits and still offer viable options for pricing, terms, conditions and risk acceptance.

The key issue when considering the options presented is this: <u>How much insurance is enough?</u> When considering the amount of coverage for large-scale risks, the Maximum Foreseeable Loss (MFL) should be analyzed. While not the sole consideration, a realistic MFL is a valid tool when making the final risk financing or insurance buying decision, even if it is less than the Total Insured Value (TIV).

For the 2012/13 Policy Year, the City's TIV of \$513,191,332 includes appraisal updates, added locations, the CyRide Intermodal Facility and the Ice Arena (formerly in the ICAP insurance program). Only FM Global has the underwriting capacity as a single insurer to provide limits sufficient to cover the City's TIV (they are offering \$515.0 Million). The maximum limits available in the insurance marketplace other than FM Global are up to \$150,000,000 per insurer. To reach insurance limits which adequately address the City's MFL requires structured insurance programs utilizing multiple companies.

Ames Maximum Foreseeable Loss (MFL)

At the June 19 meeting, an MFL scenario was proposed of a Joplin, Missouri type F5 tornado touching down at the CyRide facility, traveling east down Lincoln Way, and not lifting up until it has passed the City Maintenance Facility in east Ames. At 100% total destruction, the TIV of City facilities along this path needs to be considered in light of what valuation we use for the Power Plant. If we are not planning (or are not permitted) to replace the Power Plant, then up to approximately \$112.0 Million in Actual Cash Value (ACV) claim funds would be the coverage available. Together with other Power related facilities, this would yield a maximum \$195 million Power related loss. If the Power Plant were rebuilt at its current site, it has a replacement cost of approximately \$296.0 Million. This would increase the overall Total for Power related locations to \$379.0 Million. This is probably not a realistic scenario, but figures for this are shown in Slide 19. Non-power Municipal facilities in the tornado scenario would amount to an approximate loss of \$110.0 Million. The list and values of properties in the path of total destruction will be provided to Council in an updated spreadsheet, for which the totals are shown in Slide 19.

Splitting the Program

Given the maximum loss potential of \$195 million (ACV - Power), \$379 million (Replacement Cost - Power) and \$110 million ("Muni" or Non-power) in the tornado scenario, it became clear that splitting the Power Generation and related assets (named "Power") from the Muni assets would provide the best available options, based on what is available to the Ames account in the marketplace. The split programs are compared to the FM Global program in Options A, B, C and D.

The Options are listed in the following table.

Option	2011-12	2012-13	Option vs. Budget
Budget		\$685,895*	
Α	\$677,330**	\$823,915	+\$138,020
В		\$691,011	+\$5,116
С		\$601,089	-\$84,806
D		\$575,839	-\$110,056

^{*}includes Ice Arena

^{**}does not include added coverage for buses

The numerous differences among the insurers in Total Limits, Sub-limits, Deductibles and Flood Insurance are detailed in the Power Point slides and hand outs.

ALTERNATIVES:

- 1. Accept the proposal from FM Global for renewal of property coverage and boiler and machinery coverage during 2012/13 in the amount of \$823,915.
- 2. Accept one of the three options provided on the attached power point presentation (B,C, or D), according to the City Council's comfort with the level of risk the City would assume. The maximum insured limits reflected in these options varies from \$150,000,000 to \$300,000,000.

MANAGER'S RECOMMENDED ACTION:

Due to the ever increasing cost of property insurance coverage, it seems to be an appropriate time to consider a new approach to insuring our property that does not assume all of the City's facilities will be destroyed during the same disaster event. This change in philosophy would lead the Council to consider Options B, C, or D.

Staff believes the move to a total insured coverage of \$150,000,000 might be too radical of a switch in philosophy to justify at this time. If the Council members concur, you will have to decide which of the remaining two options (B or C) satisfy your risk tolerance level. While Option B costs \$90,000 more than Option C, it does provide an additional \$100,000,000 of coverage. However, Option C offers lower deductibles than Option B should a disaster occur.

In the event that Council feels most comfortable staying with the incumbent insurer, this would be done with the recognition that the City is paying for a gross level of coverage that can never be collected. In order to hope for an FM Global renewal after 2012/13, the Council would also need to recognize the urgency of spending between \$1 million and \$4 million to address FM Global's highest capital improvement priorities within the next twelve months.

Property Insurance and Risk Management



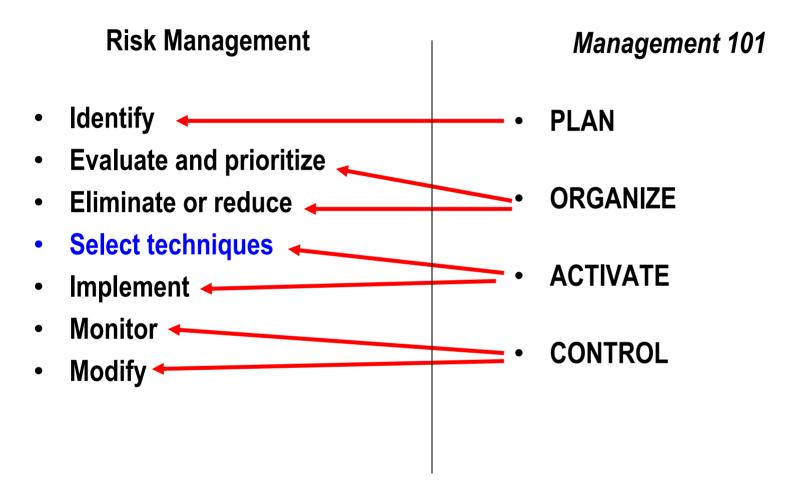
David W. Eaton, ARM Risk Manager June 26, 2012

The Risk Management Process

- Identify risk exposures
- Evaluate and prioritize risks, based on potential impact on organization
- Eliminate, reduce and control as much risk as possible
- Select risk management techniques for remaining risk
- **Implement** the chosen handling techniques
- Monitor the results
- Modify the techniques as needed

This process assists an organization in controlling its own destiny, versus relying solely on insurers and the insurance marketplace as a risk handling technique.

Risk Management is really just Basic Management



Risk Handling Techniques

- Self-assumption
- Risk Control
 - Employee Safety
 - Facilities
 - Liability
 - Special Risks
- Risk Finance, examples:
 - Self-insurance
 - Insurance
 - Accounting accrual or reserve fund
 - Line of credit
 - Ownership % of Captive insurance company
- Risk Transfer (i.e., contracts)

Property Risk Control

The Three Pillars of Protecting Property Risks

HPR - Qualities of a <u>Highly Protected Risk</u> (Property)

For high-value facilities, this means placing primary emphasis on protection systems.

The Human Element - Training

The best protection systems in the world may not offer much protection if they are improperly managed and operated by local personnel.

BCP - Business Continuity Planning

- Risk Management can help prevent a loss or mitigate its impact.
- Insurance can provide the dollars for rebuilding.
- BCP is necessary to re-start the organization's critical processes to supply products & services during a disruption.

10 Basic Qualities of a Well-Protected Facility (HPR)

- 1. Management Commitment to Loss Prevention
- 2. Suitable Construction
- 3. Protection Against Exposure Hazards: Fire, Windstorm, Flood, Earthquake, etc.
- 4. Sprinklers Where Needed
- 5. Adequate Water Supply
- 6. Special Hazards Protected
- 7. Good Housekeeping
- 8. Regular Inspections
- 9. Good Maintenance of Buildings and Equipment
- 10. Human Element: Emergency Organization for the Facility

The above answers the question, "What should management do to mitigate property risk at our facilities?"

2008 – 09 FM Global Renewal Cover Letter

As you know, the above policy is scheduled to renew on 1 July. We have been reviewing our file and the latest Risk Reports for your facilities in preparation for the renewal. When we began as business partners in 2005, there was a clear sense that in the first few years, many of the risk improvement items we had identified at that time would be evaluated and completed. Quite honestly, we are rather disappointed in the lack of progress in risk improvement at your facilities.

While we do appreciate the City of Ames as a business partner, the normal spirit of partnership we normally see with virtually all of our customers seems to be lacking. I am hopeful we can mutually agree to correct the situation.

2011 – 12 FM Global Renewal Cover Letter

I am pleased to present to you our renewal proposal for the coming sear. As discussed in our recent meeting, our risk improvement recommendations at the power plant remain open. In order for us to continue our relationship beyond July 2012, these recommendations must be well on their way to completion during the coming policy period.

We appreciate the City of Ames as a business partner and want to continue into the future. However, we will only be able to do so with risk improvement. **Excerpt: RESOLUTION NO. 12-041 (2/14/12)**

RESOLUTION AWARDING PROFESSIONAL SERVICES AGREEMENT FOR POWER PLANT FIRE RISK MITIGATION FOR THE CITY OF AMES, IOWA

WHEREAS, in order to address these fire risks and possible loss events, staff is pursuing a contract to provide fire protection engineering, contract administration, and possible field installation oversight; and,

WHEREAS, the 2012-2017 Capital Improvements Plan recently submitted to the City Council outlines planned fire protection improvements to various facilities within Electric Production, and the Risk Manager and the Utility staff have agreed that the projects in this plan will address the most pressing needs for fire protection upgrades within Production; and.

WHEREAS, staff will utilize this contract to prioritize our plans with the City's Risk Manager and the insurance company to achieve the most value and protection for the dollar; and,

FM Global 2012-13 Renewal Proposal Cover Letter

As discussed in our recent meetings, although the key risk improvement recommendations we have been making in the past remain open, we are pleased with the direction that risk management is headed and want to work with you in finally getting them completed over the coming months.

Biggest Marketing Challenges

- # Carriers with Limits Capacity for our needs >\$300M
- # Carriers with Power Gen underwriting appetite for COA small size
- 16 7 4 (Carriers contacted – Submissions – Quotes)
- Flood exposure in Ames

FEMA Flood Map - CyRide



FEMA Flood Map – Water Pollution Control



FEMA Flood Map – Intermodal



FEMA Flood Map – Airport



City of Ames Self-Insured Risks

(in Addition to Property Deductibles & Sub-limits)

- All City Vehicles except Bookmobile
- Street signs, lighting & traffic signals; airport runways and lighting
- Workers Compensation Claims up to \$475,000 per claim
- Health Insurance Aggregate up to 120% of Estimated Claims (\$1.1M annual exposure)
 - Health Insurance Individual Claims < \$125,000

COA Vehicle Exposure

Replacement Values

Concentrations of vehicles only at the Department level.

NOT TOTAL COA FLEET VALUE

Estimated Total Replacement Value

June 30, 2012

Operating Department	<u>v</u>	/eh	icle Values	<u>Domiciled</u>
Fire Dept	9	\$	3,464,000	Fire Stations 1, 2, & 3
Police Dept	9	\$	620,000	outside - city hall
Library	9	\$	210,000	Inside - Library
WPC	•	\$	844,000	Inside - WPC
Water Plant	\$	\$	255,500	Inside - water plant
Electric Production	9	\$	1,135,000	Outside - around the power plant
Electric Distribution	•	\$	1,674,150	Inside/outside - Electric Distribution Center
Streets Maintenance	•	\$	2,148,000	Inside / Outside - Maintenance Facility
Utility Maintenance	\$	\$	1,074,000	Inside / Outside - Maintenance Facility
RRP	•	\$	556,000	Inside - RRP
ROW	\$	\$	420,800	Inside - cemetery garages

\$ 12,401,450

Ames' Maximum Foreseeable Catastrophic Property Loss Scenario



Ames' Maximum Foreseeable Catastrophic Property Loss Scenario

(F5 Tornado Following Lincoln Way West to East)

Tornado Damage = Total Loss - Per Slide	All Power Locations w/ Power Plt. @ Replacement	All Power Locations w/ Power Plt. @ ACV	Muni @ Replacement Cost
"MFL" - Loss Potential	\$379,384,146	\$195,467,146	\$ 110,449,172
Policy Limits to Consider	\$ 300,000,000	\$200,000,000	\$ 150,000,000

Power Locations include Power Plant, Resource Recovery, Gas Turbines and Substations.

Muni Locations include CyRide, City Hall, Electric Admin. & Distribution, Library and Water Treatment.

FM Premium History

Year	Total Insured Values (TIV)	Premium	Account Rate per \$100
2008-09	\$333M	\$444,098	.1333
2009-10	\$363M	\$473,281	.1303
2010-11	\$439M	\$523,303	.1191
2011-12	\$471M	\$677,330	.1438
2012-13	\$513M	\$823,915	.1607

FM Global 2011

Expiring Program as renewed on 7/1/11

Values Reported \$471,692,588 PD \$500M

Price: \$677,330 Annual Premium

FM Global

Mid-Year Additions not in above:

Cy-Ride buses PD Value \$28.07M

- Intermodal facility PD Value \$3,234
- Ice Arena \$4.1M PD Value to be moved from ICAP to main property program 7-1-12

Deductibles

Option A

FM Program with updated 2012 Values & Rates

\$515M

Values Reported \$513,191,332 PD

FM Global

Deductibles

Price: \$ 804,215 PD \$ 19,700 CyRide buses on-premises \$ 823,915 Total Annual Premium

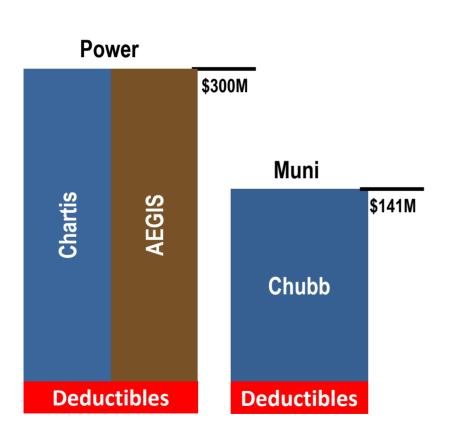
Advantages to Option

- FM Global has highest limits available in the market
- Best Flood Coverage

- Relationship with FM Global is not strong
 - Loss Control Improvements no agreement on priorities for Risk Mitigation capital expenditures
 - Capital Improvements required > \$1.0M
 (FM estimates are low)
 - Power Plant rate penalties in place > \$70,000
- If no progress is made on FM Loss Control Priorities, likely no renewal offer for 7-1-13
- No coverage for parked vehicles on-premises (other than CyRide effective 5/15)

Option B

Split Program into <u>Power</u> and <u>Muni</u> with Limits Based on a \$300<u>M</u> Maximum Foreseeable Catastrophic Loss



Price: \$ 522,000 Power

\$ 169,011 Muni incl. CyRide & other \$ 691,011 vehicles on-premises

Advantages to Option

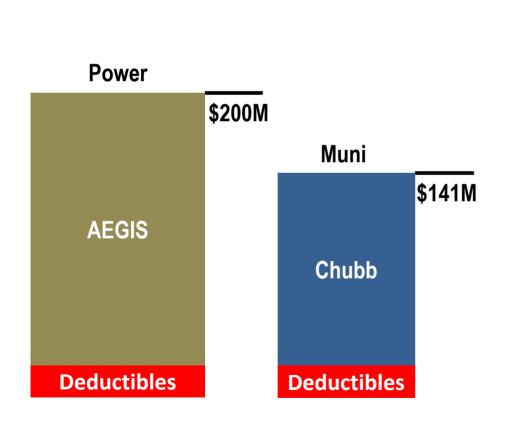
- Provides maximum available limits
- Carriers underwrite to their strength
- Loss Control is designed by City
- Fire Trucks, other vehicles covered in addition to CyRide

- Limited coverage for 100 year Flood Zones
 - \$6M CyRide and Sewage Treatment
 - \$10M Intermodal and Airport
- Higher deductibles vs. FM for Turbine/Generator sets; \$500K vs. \$350K (\$600K – Unit #8)
- Vehicles in the open sublimit \$5.0 M

Option C

Split Program into Power and Muni

with Limits Based on a \$200M Maximum Foreseeable Catastrophic Loss



Price: \$ 432,078 Power

\$ 169,011 Muni incl. CyRide & other

\$ 601,089 vehicles on-premises

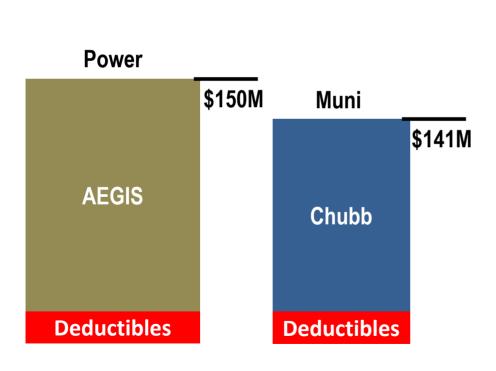
Advantages to Option

- Philosophical best match with Power Generation long range planning:
 - Power Plant does not purchase more coverage than the "Functional Cost" to replace Megawatts capacity
 - Allows carriers to underwrite to their strength
- Loss Control is designed by the City
- Lines up with MFL Worksheet \$\$\$

- Excess Flood layer for 100 yr. Flood Zones
 - \$6M CyRide and Sewage Treatment
 - \$10M Intermodal, \$7.5M Airport
- Higher deductibles vs. FM for Turbine/Generator sets; \$350K for both (FM at \$350,000/\$250,000)

Option D

Split Program into <u>Power</u> and <u>Muni</u> with Limits Based on a \$150M Maximum Foreseeable Catastrophic Loss



Price: \$ 406,828 Power

\$ 169,011 Muni incl. CyRide & other

\$ 575,839 vehicles on-premises

Advantages to Option

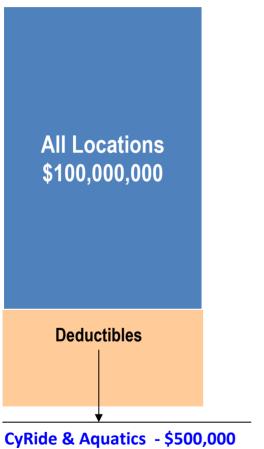
- Possible best match with COA Power Generation long range planning:
 - Power Plant would not purchase more coverage than the "Functional Cost" to replace Megawatts capacity
 - Loss Control is designed by the City
- Provides lowest available price

- Excess Flood layer for 100 yr. Flood Zones
 - \$6M CyRide and Sewage Treatment
 - \$10M Intermodal, \$7.5M Airport
- Higher deductibles vs. FM for Turbine/Generator sets; \$350K for both (FM at \$350,000/\$250,000)

Flood Limits & Deductibles

FM Global

Muni / Power Program



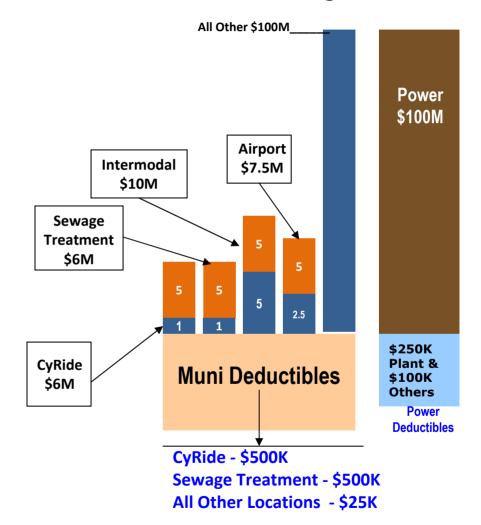
CyRide & Aquatics - \$500,000

Power Plant - \$250,000

Substations - \$100,000

All Other Locations - \$25,000

All Per Location / Per Occurrence



Policy Deductibles

	Option A	Option B Power	Option B Muni	Option C & D Power	Option C & D Muni
Deductibles					
All-Risk, except	\$25,000		\$25,000		\$25,000
Power Plant & Combustion Turbines	\$250,000	\$250,000		\$250,000 Power Plant	
Gas Tubine #2 GE LM2500+	\$350,000	\$500,000		\$350,000	
Combustion Turbine Generators		\$500,000		\$350,000	
Unit #8 Steam Turbine / Generator		\$600,000		\$350,000	
Substations	\$100,000	\$100,000		\$100,000	
Resource Recovery Building	\$100,000	\$100,000		\$100,000	
Sewage Treatment / Water Treatment	\$100,000		\$100,000		\$100,000
Transit	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Mobile Equipment	Excluded	\$50,000	\$50,000	\$50,000	\$50,000
Flood / Earthquake	\$25,000 / \$250,000 Per Location	\$100,000 EQ / Flood	\$100,000	\$500,000	\$100,000
Flood @ Zone A	\$500,000 CyRide &		\$500,000 CyRide &		\$500,000 CyRide &
	Aquatics Center per Location		Sewage Treatment		Sewage Treatment

2012/2013 Account Rate Comparison

Year	Insurer Participation	TIV of Carrier Participation	Premium TRIA prorated	Account Rate Per \$100 of Value	Blended
Option A	FM Global Power	\$371,400,950	\$602,201	.1564 (incl. rate penalty beg. 2011)	
	FM Global Muni	\$141,790,381	\$221,714	.1621 (incl. CyRide Flood – '10 was .09)	
		Slide 22	\$823,915		.1607
Option B	Chartis Power 50%	\$185,700,475	\$335,500	.1308	
	Aegis Power 50%	\$185,700,475	\$161,500	.0629	
	Chubb Muni	\$141,790,381	\$169,011	.1192	
		Slide 23	\$691,011		.1298
Option C	Aegis Power 100%	\$371,400,950	\$432,078	.1163	
	Chubb Muni	\$141,790,381	\$169,011	.1192	
		Slide 24	\$601,089		.1171
Option D	Aegis Power 100%	\$371,400,950	\$406,828	.1095	
	Chubb Muni	\$141,790,381	\$169,011	.1192	
		Slide 25	\$575,839		.1124

Lincoln Way Tornado Corridor – Loss Scenarios with Deductibles

(Impacts Main PD Losses – no ancillary or sub-limited coverage)

Options	Description	Deductibles
Option A FM Global	For tornado, the deductible would be the largest applicable deductible for the occurrence. The facilities are not subject to their % windstorm deductible as it applies only to coastal areas, therefore the deductible would be based on the location or specific property affected. CONCLUSION: FM Claim \$489,833,318 DEDUCTIBLE: Highest applicable deductible applies - Gas Turbines 1 @ \$350,000	\$350,000
Option B AEGIS / Chartis	Two separate deductibles would apply. For the Muni property it would be the \$100,000 deductible if the water treatment plant is affected. For AEGIS, their deductible would be similar to FM Global if the Gas Turbines are affected, which is \$350,000. Otherwise, it would be \$250,000. CONCLUSION: Claim \$379,384,146 – Chartis terms apply	Highest applicable deductible applies T/G Unit #8: \$600,000 Chubb – WPC: \$100,000 \$700,000
Option C AEGIS / Chubb	AEGIS Claim amount: \$200,000,000 Chubb Claim amount: \$110,400,000 (100% values)	Highest applicable deductible applies T/G Unit #8: \$350,000 Chubb – WPC: \$100,000 \$450,000
Option D AEGIS / Chubb	Claim amount: \$150,000,000 Chubb Claim amount: \$110,400,000 (100% values)	Highest applicable deductible applies T/G Unit #8: \$350,000 Chubb – WPC: \$100,000 \$450,000

Other Public Sector Coal Power Plants Overview

	CFU	MPW
Broker	Willis	NA
Carrier	Aegis	FM Global
Generating capacity	49MW	293MW
Power Coverage to Value	70%	100%

Questions?

Next Steps?

D. Eaton June 21, 2012				
Maximum Foreseeable Loss (MFL) Estim	ate for Lincolnway "Torna		MEL Value	MEL Valore
		Comments	MFL Values	MFL Values
Name	Comments		Power Program	Muni Program
Transit Garage & Maintenance Building (CyRide)	appraisal @ reproduction cost			\$ 11,581,000
Value of buses and vehicles stored inside CyRide building on on grounds	68 buses, 4 cars, 2 trucks			\$ 28,070,000
City Administration (CITY HALL)	appraisal			\$ 17,798,000
Power Plant bldg + contents	appraisal	\$ 296,580,000	\$ 112,000,000	
SUBSTATIONS - all, not just in Corridor		Replacement Cost	ACV \$ 20,681,911	
Electric Admin. Bldg.	appraisal			\$ 733,000
Water Plant	current insured value			\$ 13,260,839
Library-current	current insured value			\$ 13,484,517
Library-expansion	approximate project cost, round number			\$ 20,000,000
Resource Recovery	current insured value		\$ 12,632,235	
Public Works	current insured value			\$ 3,369,355
Electric Distribution Building	current insured value			\$ 2,152,461
Gas Turbines	current appraisal		\$ 49,490,000	
Loss Potential		\$379,384,146	\$ 194,804,146	\$ 110,449,172
		Using Repl Cost Power Plant	Using ACV at Power Plant	Muni at Replacement Cost
Policy Limits to Consider		\$ 300,000,000	\$ 300,000,000	\$ 150,000,000