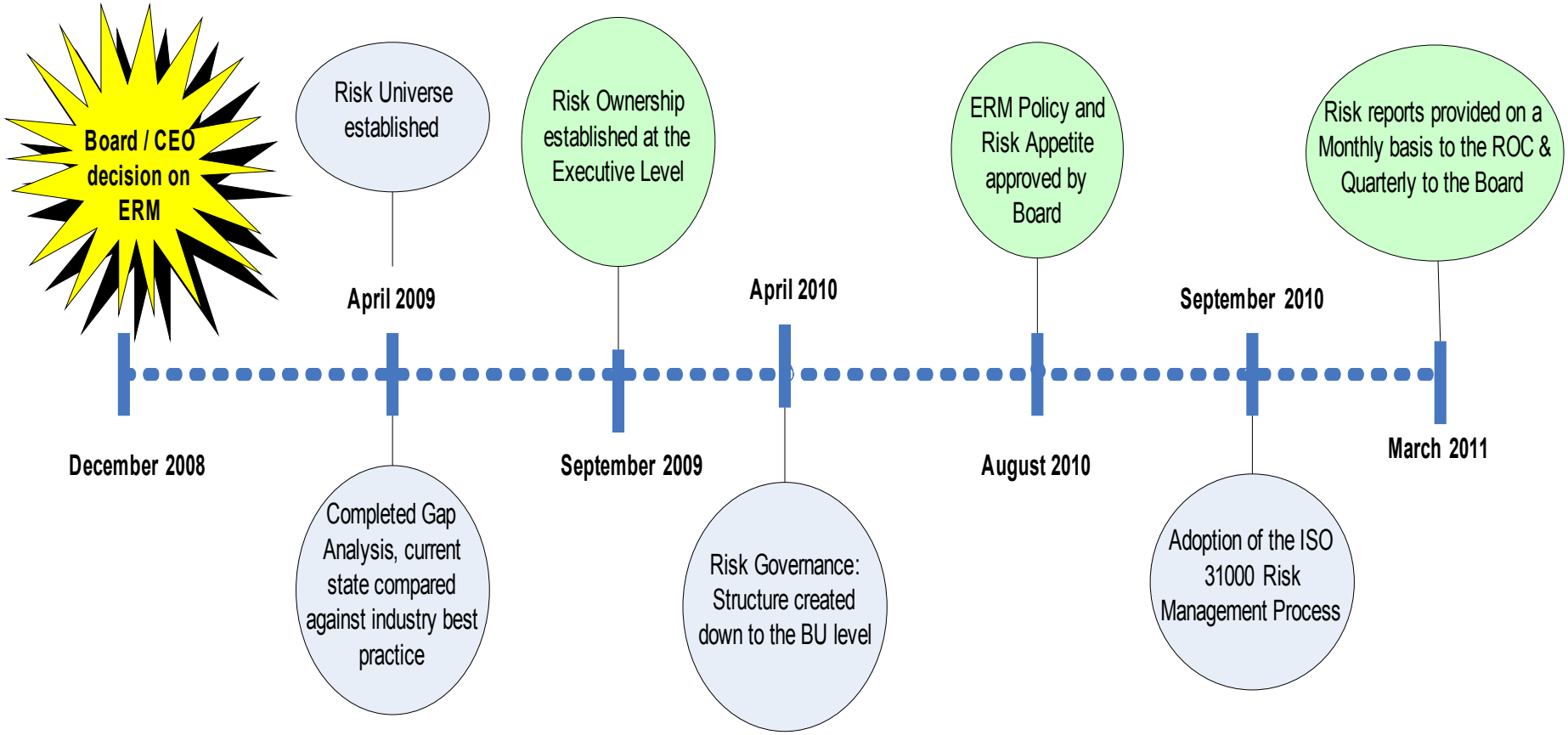
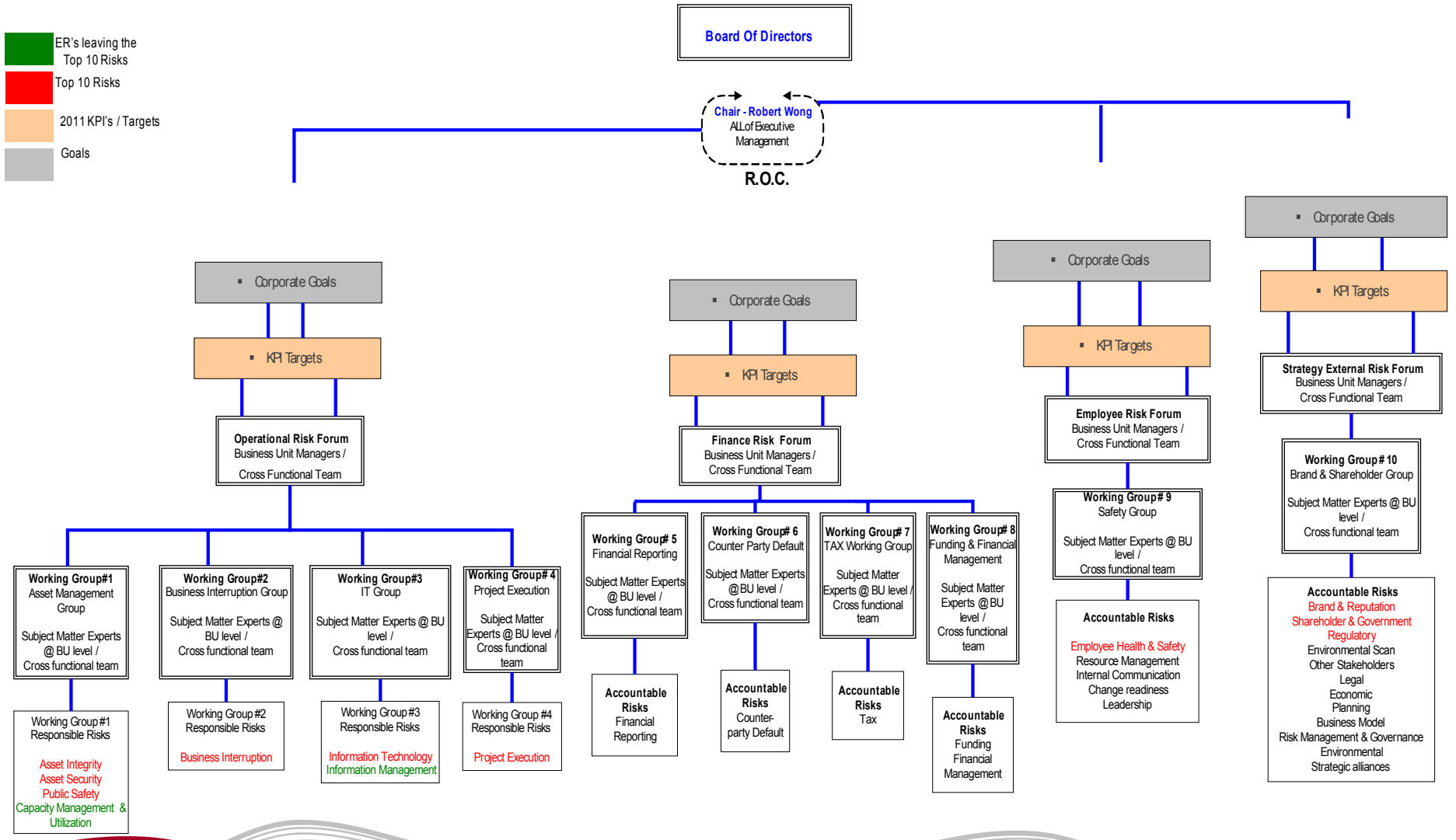
Why is Risk Governance Important to THC?

EVENTS	DATE	QUALITATIVE IMPACT
Contact Voltage	Nov 20, 08- Jan 29, 09	· Loss of Reputation · Loss of Strategic Focus · Negative publicity
Flood at Dufferin Station	January 15, 2009	· Service failure · Failure of back up systems · Issues with planning and management · At customer's expense
Ice storm	January 1998	· Service failure · Issues with planning, coordination & control · Low customer confidence
Data Hacking	July 28, 2009	· Safety & security of customer data · Negative publicity · Low customer confidence
Customer Power Interruptions		· Service failure · Low customer confidence

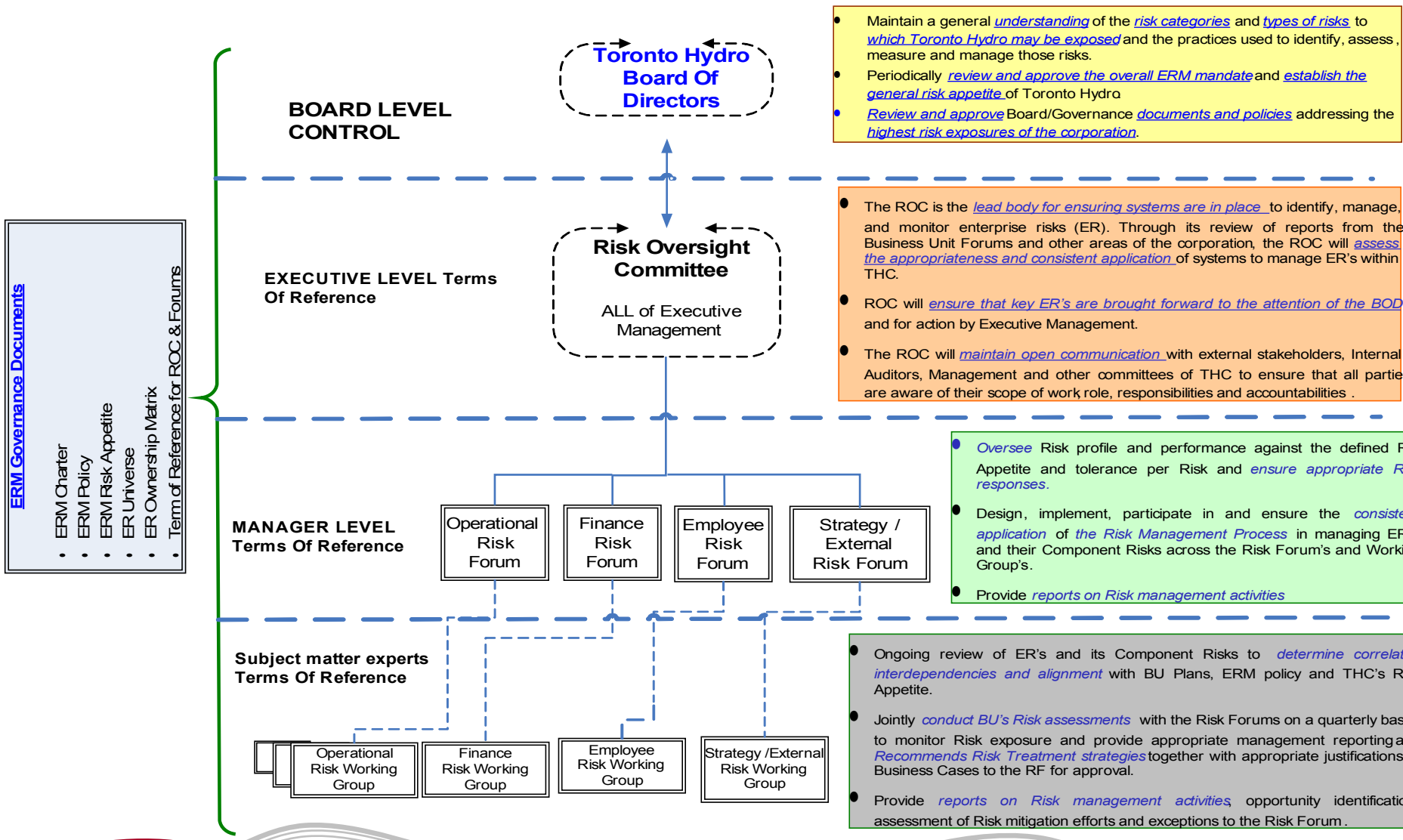
THC's Response



ERM Governance Structure



Role in ERM Governance



THC's Adoption of ISO 31000

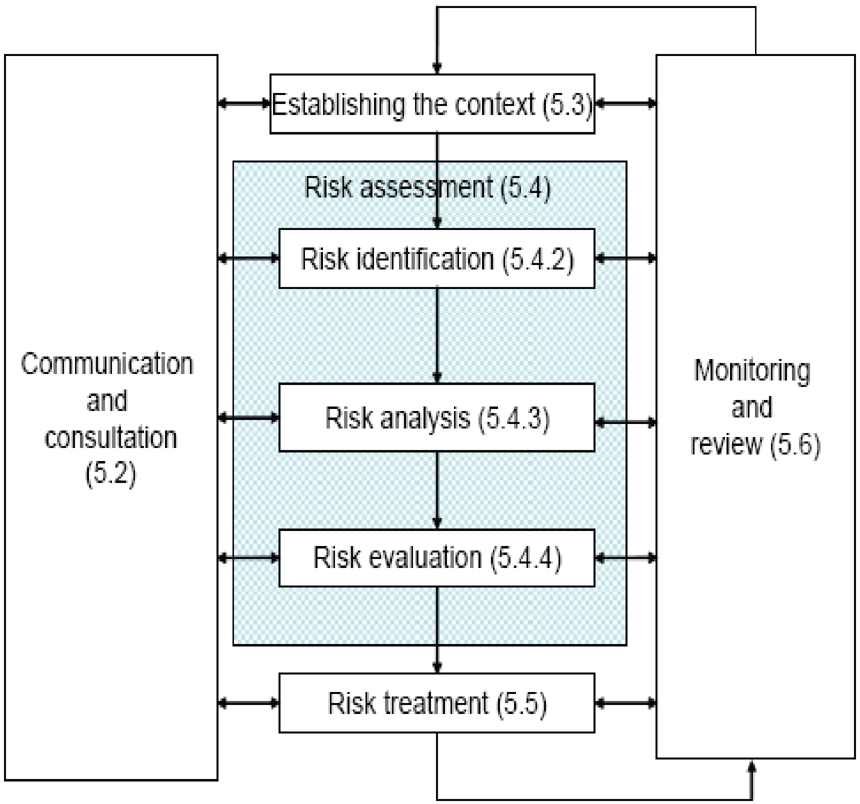


Figure 3 — Risk management process

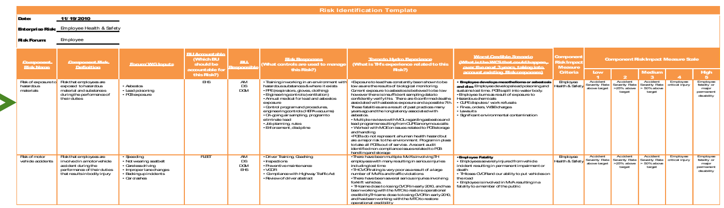
Source: ISO 31000

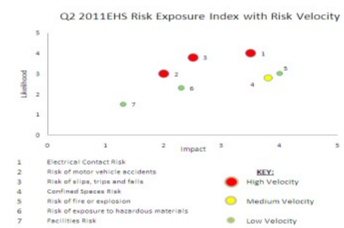
Establishing the Context

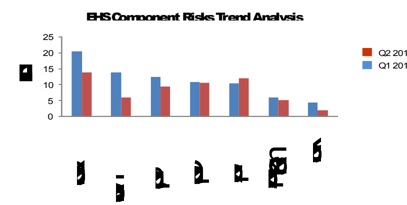
Risk Forum Name: Employee Risk Forum

Update Date: 11/11/2010

Enterprise Risk (ER)	ER Definition	Business Unit (BU)	Impact (What BU's objectives does this risk impact?)	Consequence
Employee Health & Safety Risk	The Risk that Toronto Hydro's employees may be exposed to serious or fatal injuries as a result of the work environment in which they operate.	Facilities	1. Ensuring employee workplace complies with regulatory requirements and is supportive of the intended work.	1. Employee injury of fatality 2. Property damage 3. Public injury of fatality 4. Work process impediment
		Asset Management	1. Primary Impacts: Safety - Zero Accidents and Severity. We could be above the target if this risk (serious or fatal injuries) has been realized. The same applies to Risk Appetite, we do not have an impact that may lead us over the Risk appetite limit of "Accident Severity Rate above target". 2. Unlikely Impacts (For Working Group Discussion): Attendance/Wellness, CAPEX Program Attainment , External Demand Processing, Net Capital Expense, OPEX, Customer Service Index and Customer satisfaction. All other KPIs at AM level most likely are not going to be impacted.	1. Primary Consequences: AM Zero Accident and Severity target may be exceeded due to injury to Toronto Hydro employees. 2. Unlikely Consequences (For Working Group Discussion): High Absenteeism, Low worker morale, Decrease productivity, Lower earnings in increasing the cost of doing business, Increase in SADI, SAFI & FESI indices, low program attainment, Increased OPEX, Decreased CAPEX. MOL infractions, fines and charges. Legal liability. Social and family devastation, Collective agreement violation, WSIB premium, fines and deductions, Toronto Hydro safety record and reputation.
		EMU	1. Build and maintain relationships with internal and external stakeholders to ensure effective coordination of efforts during emergencies and/or major events 2. Develop effective and coordinated emergency and business continuity plans to ensure the highest levels of mitigation, preparedness, response and recovery	1. Loss of critical internal and external stakeholders' trust (specifically, mutual aid resources) 2. Ineffective emergency and business continuity plans.







Enterprise Risk Management Path to excellence			RISK TREATMENT PLAN
			Feb 23 2011
Enterprise Risk: Employee Health and Safety			
Component Risk: Electrical Contact			
Risk Treatment Options:	**Cost**	**Resources Required**	**Benefits**
1 Establish comprehensive program		150 hours	Accountabilities defined, verify all associated hazards controlled
2 Develop audit process		40 hours	On-going assurance to management controls are being applied

Proposed Risk Treatment: Establish a program that integrates all current activities associated with preventing electrical contact into one. For example, the Work protection Code, Electrical Utility Safety Rules, TH Rule Book, pre-work planning, etc. This program would then be the foundation to associated training activities and the establishment of an audit protocol to measure conformance and report the same to management.

Performance Measures: Number of electrical contact incidents - (Target is zero)

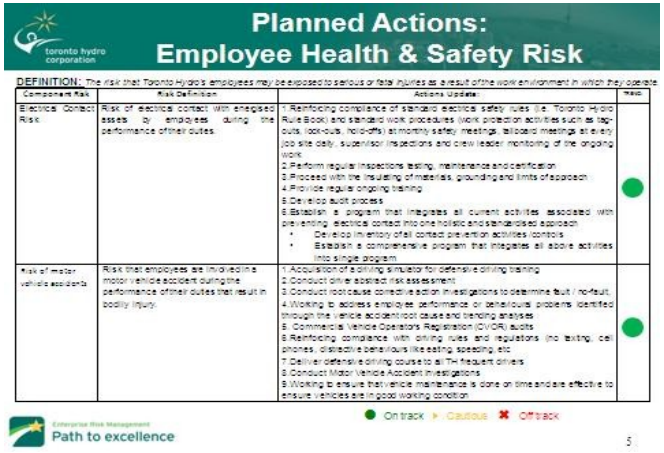
Rationale (cost / benefit summary/ projected REI after treatment is implemented): The development of a comprehensive electrical contact prevention program supported by training and auditing will reduce the REI. This is achieved by providing greater certainty to management that controls for all potential hazrds have been implemented and are being accurately monitored which is something that cannot be done at present.

	Step	DRP & Timeline
1	Develop inventory of all contact prevention activities/controls	D. Johnston May 2011
2	Establish a comprehensive program that integrates all above activities into single program	D. Johnston Sept 2011
3	Ensure training is established so that the workforce is knowledgeable of all program aspects	D. Johnston Oct 2011
4	Implement an audit protocol of the program and report findings to management regularly	D. Johnston Oct 2011

Ottawa 2011 Capital ConneXions

Board Reporting

1. Quarterly updates / Top 5 out of 33



Planned Actions: Employee Health & Safety Risk

DEFINITION: *The risk that Toronto Hydro's employees may be exposed to serious or fatal injuries as a result of the work environment in which they operate.*

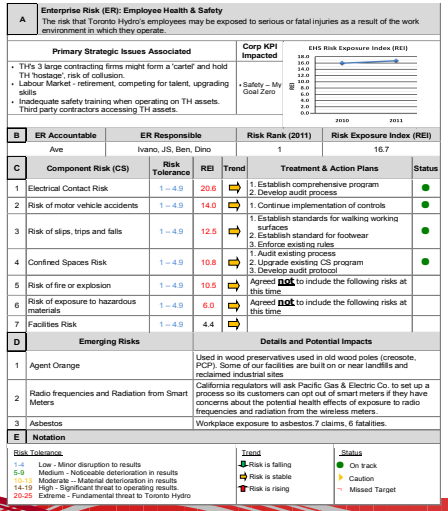
Component Risk	Risk Definition	Actions Updates	Trend
Electrical Contact Risk	Risk of electrical contact with energized assets by employees during the performance of their duties.	1. Reinforcing compliance of standard electrical safety rules (i.e. Toronto Hydro Rule Book) and standard work procedures (work protection activities such as tag-outs, lock-outs, hold-offs) at monthly safety meetings, tailboard meetings at every job site daily, supervisor inspections and crew leader monitoring of the ongoing work 2. Perform regular inspections testing, maintenance and certification 3. Proceed with the insulating of materials, grounding and limits of approach 4. Provide regular ongoing training 5. Develop audit process 6. Establish a program that integrates all current activities associated with preventing electrical contact into one holistic and standardized approach • Develop inventory of all contact prevention activities / controls • Establish a comprehensive program that integrates all above activities into a single program	●
Risk of motor vehicle accidents	Risk that employees are involved in a motor vehicle accident during the performance of their duties that result in bodily injury.	1. Acquisition of a driving simulator for defensive driving training 2. Conduct driver abstract risk assessment 3. Conduct root cause corrective action investigations to determine fault / no-fault. 4. Working to address employee performance or behavioural problems identified through the vehicle accident root cause and trending analyses 5. Commercial Vehicle Operators Registration (CVOR) audits 6. Reinforcing compliance with driving rules and regulations (no texting, cell phones, distractive behaviours like eating, speeding, etc 7. Deliver defensive driving course to all TH frequent drivers 8. Conduct Motor Vehicle Accident investigations 9. Working to ensure that vehicle maintenance is done on time and are effective to ensure vehicles are in good working condition	●

● On track ▶ Cautious ✖ Off track

Enterprise Risk Management
Path to excellence

5

2. Short Term / Long Term Treatment Plans



A Enterprise Risk (ER): Employee Health & Safety
The risk that Toronto Hydro's employees may be exposed to serious or fatal injuries as a result of the work environment in which they operate.

Primary Strategic Issues Associated	Corp KPI Impacted
• THs 3 large contracting firms might form a 'cartel' and hold TH hostage', risk of collusion. • Labour Market - retirement, competing for talent, upgrading skills • Inadequate safety training when operating on TH assets. Third party contractors accessing TH assets.	• Safety – My Goal Zero

EHS Risk Exposure Index (REI)

B	ER Accountable	ER Responsible	Risk Rank (2011)	Risk Exposure Index (REI)
	Ave	Ivano, JS, Ben, Dino	1	16.7

C	Component Risk (CS)	Risk Tolerance	REI	Trend	Treatment & Action Plans	Status
1	Electrical Contact Risk	1 – 4.9	20.6	⇨	1. Establish comprehensive program 2. Develop audit process	●
2	Risk of motor vehicle accidents	1 – 4.9	14.0	⇨	1. Continue implementation of controls	●
3	Risk of slips, trips and falls	1 – 4.9	12.5	⇨	1. Establish standards for walking working surfaces 2. Establish standard for footwear 3. Enforce existing rules	●
4	Confined Spaces Risk	1 – 4.9	10.8	⇨	1. Audit existing process 2. Upgrade existing CS program 3. Develop audit protocol	●
5	Risk of fire or explosion	1 – 4.9	10.5	⇨	Agreed **not** to include the following risks at this time	
6	Risk of exposure to hazardous materials	1 – 4.9	6.0	⇨	Agreed **not** to include the following risks at this time	
7	Facilities Risk	1 – 4.9	4.4	⇨		

D	Emerging Risks	Details and Potential Impacts
1	Agent Orange	Used in wood preservatives used in old wood poles (creosote, PCP). Some of our facilities are built on or near landfills and reclaimed industrial sites
2	Radio frequencies and Radiation from Smart Meters	California regulators will ask Pacific Gas & Electric Co. to set up a process so its customers can opt out of smart meters if they have concerns about the potential health effects of exposure to radio frequencies and radiation from the wireless meters.
3	Asbestos	Workplace exposure to asbestos.7 claims, 6 fatalities.

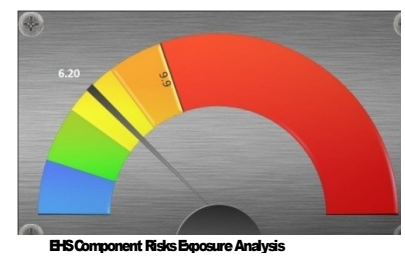
E Notation

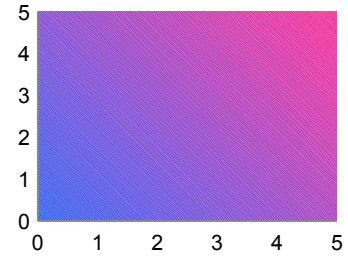
Risk Tolerance
1-4 Low - Minor disruption to results
5-9 Medium - Noticeable deterioration in results
10-13 Moderate – Material deterioration in results
14-19 High - Significant threat to operating results.
20-25 Extreme - Fundamental threat to Toronto Hydro

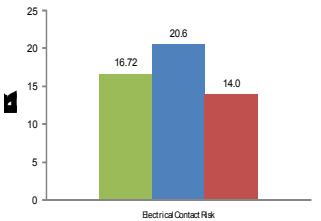
Trend
Risk is falling
Risk is stable
Risk is rising

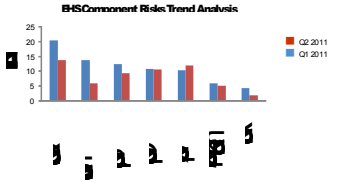
Status
On track
Caution
Missed Target

3. Dashboards

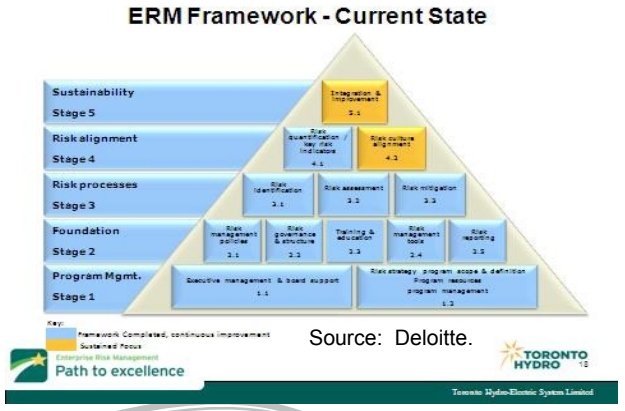








4. ERM Program Implementation Status



Source: Deloitte.

ERM's Maturity Model

1	2	3	4	5
Initial/Ad Hoc	**Fragmented**	**Comprehensive**	**Integrated**	**Strategic**
▫ Enterprise takes minimal Risks into consideration for determining vulnerabilities to Risks ▫ Undefined objectives, policies and processes ▫ Ad hoc and chaotic ▫ No accountability for Risks ▫ No formal process for Risk Assessments	▫ Objectives and policies mainly undefined ▫ Risks are defined differently at different levels and in different parts of the organization ▫ Risk is managed in silos ▫ Disparate monitoring and reporting functions ▫ Limited alignment between Risk and Strategy	▫ Risk Universe is identified ▫ Common Risk Assessment / response approach developed and adopted ▫ Communication of top strategic Risks to the senior management team ❑ Clear accountability assigned to each Risk	▫ Risk Management activities coordinated across business areas ▫ Risk Analysis tools developed and communicated ▫ Enterprise Risk monitoring, measuring s and reporting ▫ Opportunity Risks identified and exploited	▫ Risk discussion is embedded in strategic planning, capital / resource allocation , product development, vendor selection etc. ▫ Early warning systems to notify the Risks above established threshold to Board and Management ▫ Linkage to performance measures and incentives

ERM Team's Role

- ***Oversee, support and advise*** on matters relating to the Risk Management Process for all Risk Forums
- ***Facilitate, develop plans and provide training*** to enhance Risk awareness across all Risk Forums
- ***Design , implement , sustain and improve an effective ERM framework***
- ***Support, cooperate and promote*** program integration to ensure organisational alignment
- ***Work with Risk Forums*** to build methodologies and processes to conduct Risk Assessments
- ***Consolidate the reporting function*** across all Risk Forums to the Risk Oversight Committee (ROC)
- ***Sustain and mature***: Continue to embed ERM into the culture and core processes of THC

ERM in Practice: Lessons Learned

- ***Ongoing Executive Management and Board Support:*** A critical aspect in driving the buy in and support for ERM
- ***A clearly developed Framework for implementing ERM enterprise wide:*** Consistency and linked to best practise
- ***Establishing Risk Ownership:*** Clear accountability for each risk at the Executive level, there can be only one accountable
- ***Establishing a formal Risk Governance Structure:*** From Board down to BU's, a cross functional structure to support Executive Management in managing, monitoring and reporting on Risks
- ***Adoption of a Risk Management Process*** that is standardized and in line with industry best practice
- ***Embedding Risk Management into Employee Performance Contracts:*** Foster ownership of Risk Management at all levels and embed into organizational culture
- ***Design, implement, sustain and improve the ERM framework:*** An incremental process, start simple and evolve

SESSION OUTLINE

- Introduction
- Global Financial Crisis: Risk Management Lessons
- ERM Governance Landscape
- ERM Governance: Leading Practices
- Toronto Hydro: ERM Governance Model
- **Closing Remarks**
- Questions

Ten Principles of Effective Risk Oversight

1. Key success drivers understood
2. Strategic risk assessed
3. Defined Board oversight role
4. Robust ERM system (including people and processes)
5. Risk reporting meets Board requirements
6. Dynamic/constructive risk dialogue between Board and Executives encouraged
7. Cultural and incentive structure risk monitored
8. Critical alignments of strategy, risk, controls, compliance, incentives and people monitored
9. Emerging/interrelated risks considered
10. Board's oversight processes periodically assessed

Source: National Association of Corporate Directors, BRP, 2009, modified.

Closing Remarks

- Effective Risk Governance is no longer an option - it is a pre-requisite!
- Boards role in effective Risk Governance will continue to evolve
- ***Leveraging best practices outlined today will help Boards and Executives on its journey to Risk Governance Effectiveness***

"When the tide goes out, we find out who's been swimming without a bathing suit"

Warren Buffett, July '07

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Questions?

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