



Extended Power Failure – Vancouver BC: July 14th and July 15th 2008 by Glen Magel

For the City of Vancouver’s business community, Monday and Tuesday, July 14 and 15 2008 will stand out as a stark reminder of the vulnerability of disaster and the need for business to implement business resiliency. Today’s business community is dependent on computers and access to the internet and on July 14th businesses were literally left fumbling in the dark during Vancouver’s power outage. “How did business manage before we had electricity?” – what were the old ways of conducting business? The blackout affected everything from network databases, online transaction processing to e-mail. Many businesses simply closed shop until power was restored on the Wednesday.

Many impacted businesses suddenly realized that they needed to consider emergency and business continuity planning to incorporate business resiliency within their operations. Additionally, government, non-government, and utilities have continued to provide support programs to prepare business to plan and prepare for, and mitigate disasters. This blackout continues to echo the need to plan and prepare for disasters. Each event provides opportunities for business to review their current plans in place and identify best practises from the outcome of the event at hand.

EPICCC has partnered with *Emergency Management British Columbia Critical Infrastructure, City of Vancouver, BC Hydro* and the *Joint Emergency Liaison Committee* to provide businesses with information and tools to assist in becoming prepared for emergencies. As a result of this partnership we are pleased to provide the following: (1) A survey of Vancouver businesses that were impacted by the power failure; (2) some of the best practices identified by each of the partners; and (3) some information regarding mandates and practice.

City of Vancouver - Survey

The City of Vancouver conducted a survey of businesses in the area affected by the power failure in July 2008. The response to the survey was low, however, the responses provide valuable insights into how businesses were impacted. A summary of the survey results is provided below to give you an idea of the types of business interruptions.

Section 1: About Your Business

Business Sectors	46
Non-Government Organizations	1
Private-Education	2
Private-Finance	4
Private-Other	12
Private-Professional	13
Private-Retail	10
Public-Education	2
Public-Other	2

Was the Head Office impacted?	
Yes	35
No	12

Were your core information technology assets located in the impacted area?	
All	27
Some	12
None	6
Blank	2

Customer Base	
Local	21
Regional	1
Provincial	9
National	4
International	12

Section 2: How the Power Outage Impacted Your Business

How long was your organization without power?	
No outage	9
1 min - 60 min	1
60 min - 12 hours	8
13 hours - 24 hours	7
25 hours - 48 hours	9
49 hours - 72 hours	9
73 + hours	2
Blank	1
Total	46

Did the power outage affect building access?	
Yes	18
No	28
Blank	1



Did computers shut down? (asked of the companies that lost power)	
Yes	34
No	2
N/A	1
Blank	1
Total	38

Did you lose critical data? (asked of the companies that lost power)	
Yes	7
No	30
Blank	1
Total	38

Does your facility have backup power?	
Yes	13
No	23
Blank	2
Total	47

Duration of backup power (out of 13 companies that had backup power)	
Unsure	5
>60 minutes	3
> 24 Hours	3
Days (1 or more)	2
Total	13

Type of generator (Out of 13 companies that had backup power)	
UPS	4
Generator	2
Combination	1
Unsure	3
Blank	3
Total	13

Did your HVAC Shut down? (Out of 38 affected by power loss)	
Yes	32
No (company with 48 hours backup power)	1
Unsure	2
Blank	3
Total	38

Business Impacts

Companies that experienced power outage:					
	Low	Medium	High	Very High	N/A
Loss of customers	12	7	5	9	5
Loss of critical data	18	6	4	1	9
Loss of productivity/manufacturing	2	5	8	15	8
Loss of reputation	16	9	2	3	8
Overall Impact	8	8	12	9	1

Companies that did not experience a power outage:						
	Low	Medium	High	Very High	N/A	Blank
Loss of customers	4		1		3	1
Loss of critical data	4				4	1
Loss of productivity/manufacturing	4				4	1
Loss of reputation	4				4	1
Overall Impact	5		1		2	1

Phone systems working	Affected	Not Affected
Yes	9	8

Cell phones working	Affected	Not Affected
Yes	32	7
No	3	0
Blank	3	2

No	27	0
Blank	2	1

Other System Failures	Affected	Not Affected
Internet	16	1
Alarm Monitoring System	2	
Server	1	1
POS Terminal	1	
Lights	1	
Parkade Door	1	
Transaction machines	2	
Blank	19	7



Section 3: Business Continuity/Emergency Planning

Was your business interrupted?	
Yes	34
Minimal	3
No	7
Blank	3

Do you have a business continuity plan?	
Yes (formal, written plan)	1
Yes (informal)	10
No	33
Blank	3

Was the plan used? (for 11 respondents who answered "yes" to previous question)	
Yes	5
Yes - somewhat useful	3
Yes - not useful	1
No	1
Blank	1

Did you activate an alternate worksite?	
Yes	7
No	31
Blank	9

Section 4: Information Flow and Communication

Did facilities management communicate with you?	
Yes	16
No	22
Blank	9

Best Practices and Information

BC Hydro

- The black out provided an excellent opportunity to activate and test BC Hydro's emergency response plans
- Activation of BC Hydro emergency centres was swift and effective
- Knowledge of the Critical Infrastructure owners expedited our ability to determine which owners were impacted by the event
- Direct communication with City of Vancouver allowed for two way discussion of important issues during the event
- BC Hydro was required to activate some elements of its own Business Continuity Plan as our head office was impacted by the outage
- BC Hydro supports the need for all businesses to have business continuity plans in place to ensure that they can continue to deliver core business functions during any type of event.



Emergency Management British Columbia – Critical Infrastructure (EMBC)

- EMBC Critical Infrastructure methodology applies to business in identifying dependencies and co-dependencies
- EMBC Critical Infrastructure process helps utilities such as BC Hydro to know the importance of their customers, and therefore gives them a better ability to respond to, recover from, and plan for outages, natural hazards such as floods, power outages etc.
- The Critical Infrastructure rating process is fast and easy - approximately 15 minutes total per asset
- Orientations in the process are ongoing
- For more detailed information on critical infrastructure contact Allan Galambos at email [Allan.R. Galambos@gov.bc.ca](mailto:Allan.R.Galambos@gov.bc.ca)

EPICC – Fifteen Steps to Readiness

1. **Brief Staff.** Tell your staff what they have to do before, during and after an earthquake - at home, at work, in the office, or on the road. The pamphlet “Prepare Now for an Earthquake in BC” is available from your local municipal Emergency Management Office. Give a copy to each employee.

http://www.pep.bc.ca/hazard_preparedness/prepare_now/prepare.html

2. **Emergency Supplies.** Keep enough emergency food, water, heat, lighting and sanitation supplies to last the average number of people on the premises for at least 72 hours.
3. **Assess Building Vulnerability.** Assess how vulnerable your building is to earthquakes. Even if you rent or lease, make inquiries. Local structural engineers or contractors may be of assistance. As well, decide what type of temporary premises you may need.
4. **Reduce Hazards.** Identify and reduce earthquake hazards within the premises. See checklist.
5. **Dangerous Goods or Hazardous Materials.** Review procedures for the storage, use, transport and disposal of hazardous materials, and prepare an inventory.
6. **Assign Tasks to Staff.** Remove any uncertainty as to what staff should do in an emergency. Assign tasks to help staff respond as quickly as possible. Train them so they know what to expect. Training is available from the Canadian Red Cross, St. John Ambulance or your local municipal Emergency Management Office.
7. **Resources.** Determine the critical resources of your business (e.g. supplies, equipment, stock). Establish a backup supplier, preferably from out of town (i.e. outside of impacted area).
8. **Transportation.** Consider how critical resources could be shipped or transported if normal routes are not available.
9. **Vital Records.** Identify vital business records and documents (e.g., computer records).



Store duplicates off premises. Set up a system for making regular backups.

10. **Communications.** Telephone systems may be disrupted. Consider alternate methods of communication with employees, suppliers and customers.

11. **Review Insurance.** Determine your earthquake insurance needs and arrange for additional coverage if required.

12. **Coordinate Plans.** Coordinate emergency plans with other building tenants, neighbours and business partners.

13. **Community Involvement.** Earthquakes affect entire communities, not just businesses. Your business may have a role to play in the recovery of your neighbourhood or municipality. Contact your local municipal Emergency Management Office to discuss your possible role. They can also assist you with business emergency preparedness.

14. **Practice.** Regularly practice earthquake response and recovery activities. Revise plans from the lessons that were learned.

15. **Consult EPICC Website.** For more detailed information on each of the above steps, visit www.epicc.org

Government, non-government, utilities and business can work together in strengthening our response to disasters by planning, preparing and mitigating against disasters.

Current Opportunities!



UNIVERSITY
OF MANITOBA

The University of Manitoba is looking for interested applicants for the position of

Director of Risk Management and Emergency Services (Level 10)

Check out the website for more information on this job

http://www.umanitoba.ca/cgi-bin/human_resources/jobs/view.pl?posting_id=81131

BCAEM Volunteer Opportunity

The British Columbia Association of Emergency Managers (BCAEM) is seeking volunteer assistance from a company or individual to manage our membership services. This would involve keeping a database of members and processing applications and renewals. We presently have 100 members.

If you are interested and would like to help promote the profession of emergency management in BC please contact:

Bill Elsner
Emergency Program Coordinator
Sunshine Coast Regional District
604-885-6887 / 604-741-1181

Bill.elsner@scrd.ca

Coming soon!

Emergency Preparedness & Service Restoration for Utilities

March 18-20, 2009
Marriott Houston West Loop
Houston Texas

“Learn what really works from those who have managed from the worst conditions”

For information on this Seminar visit:

www.infocastinc.com/index.php/conference/prep09

Mark your calendars!

Plan for tomorrow, Today!



April 27- 29, Delta Hotel, Vancouver, BC

EPICC Members receive a discount registration for our Annual Forum, so don't miss out and catch the early bird registration.

Check out the EPICC website for a detailed program and list of speakers.

<http://www.epicc.org>

Information on BC: Snow Avalanches in British Columbia

Given the unfortunate number of avalanche-related deaths in British Columbia over the past few months, we thought this information taken from the Ministry of Transportation and Infrastructure website http://www.th.gov.bc.ca/mot_org/const_maint/avalanche_weather/index.htm.

Here are some tips to protect yourself from the danger of avalanches.

- Make sure your vehicle is well prepared for winter travel.
- Observe the sign "Do Not Stop - Avalanche Area."
- Drive carefully on winter roads and in avalanche areas.
- Be aware of the possibility of avalanche related road closures. Allow extra time to reach your destination.
- Obey road closures. Highways are closed when the avalanche hazard is high and when avalanche control work using explosives is required.
- Be aware that avalanches may reach the highway without warning.
- If an avalanche blocks the highway, remain in your vehicle with seat belts on and await assistance. It is easier to find a car in the snow than it is to find a person. Try to drive to a safe area if possible. Do not attempt to drive through small avalanches.

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