

ENVIRONMENTAL LAW CENTRE

Nuclear Energy Regulation



Part I - Federal

**Laura
Bowman
Environment
al Law
Centre**

**April 13,
2010**

**Peace River
AB**



Environmental Law Centre

- Objective legal information & lawyer referrals
- education & outreach
- research & law reform
- library
- environmental search services

Presentation themes

- What to expect from nuclear regulatory process for new plants?
- How can you participate?
- What are the limitations of this process?
- What does the new federal legislation mean?
- How does the province of Alberta fit-in?

History of Federal Legislation

Atomic Energy Control Act – 1946

- established the Atomic Energy Control Board (AECB)
- First health and safety regulations 1960's
- No public participation until 1980s

Nuclear Safety and Control Act - 2000

- Nuclear Safety Commission (CNSC) is successor to the AECB
- Reports to Parliament through the Minister of Natural Resources
- Comprised of two components:
 - a staff organization (regulatory)
 - a Commission tribunal

CNSC Commission Tribunal

- Members appointed by federal Cabinet
- One of the members designated as President
- Governor in Council may issue broad Policy Directives binding on the Commission
- Mandate: health, safety, environment and national security
- Powers
 - Court of Record
 - Summon witnesses
 - Not bound by rules of evidence

New Nuclear facilities – how does it work?

- Step 1 – license to prepare site, construct and operate is applied for to CNSC



- Step 2 – Comprehensive environmental assessment: CNSC, other federal depts.
 - Need? Alternatives? Review Panel needed?
 - Minister: are environmental effects significant? Should the project happen?



- Step 3 – Licensing hearing
 - terms and conditions of licences?
 - prevent unreasonable risk to health, safety, environment through license conditions.

Very distinct roles? CNSC – murky waters

Environmental Assessment (federal)

- Screening or comprehensive (RP)
- **public** consultation requirements
- cumulative impacts
- Alternatives, need, purpose
- Are adverse environmental effects “significant”?
- Minister has final say

Licensing

- Whether or not granting license and proposed conditions present a “reasonable risk” to health safety, environment or national security.
- CNSC has final say.

Environmental Assessment under the CEAA

- *Canadian Environmental Assessment Act (CEAA)*
 - *Law List Regulations* require new facilities be subject to EA.
 - New nuclear facilities >25 MW are listed in the *Comprehensive study list regulations (s.19(d))*
 - Joint review panels are a discretionary option
 - Usually full hearing with funding
 - The norm for new nuclear (not rebuilds)
 - Review panels typically have better process than CNSC hearings. Sworn evidence, ability to cross examine, funding to participate, considerate timelines, more than 10 minutes each.

Environmental Assessment under CEAA

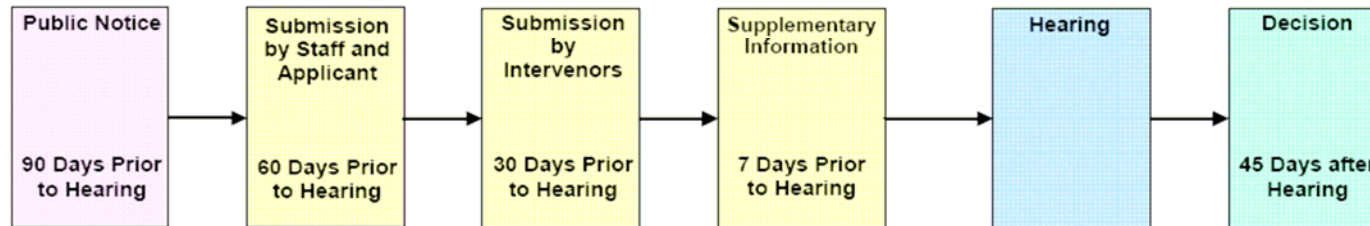
- Provides better, longer, more timely and complete access to information.
- Public consultation process is broad, simple.
- Minister decides, so you can lobby regarding result. And there is accountability. (effects are significant but justified)
- Full regional and traditional knowledge studies regarding potential impacts and ways to mitigate those impacts.
- Only way to consider impact **in context** of other industrial development and **entire project** (including transport of fuel, waste storage etc.)
- Only examination of need and alternatives to nuclear power

CNSC Regulation – Licencing of New Facilities

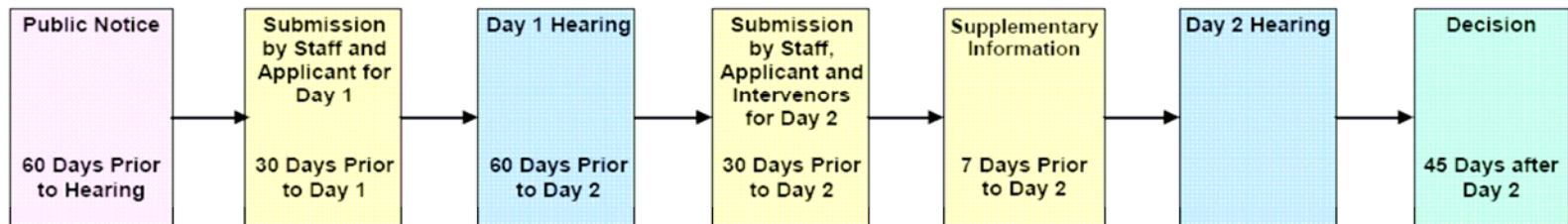
- Five separate licences
 - To prepare a Site
 - To construct
 - To operate
 - To decommission
 - To abandon
- Each licence has its own application and regulatory path
- The first three can be applied for concurrently

Public Participation – Hearing CNSC Commission

One-Day Hearing (~ 5 Months)



Two-Day Hearing (~ 6 Months)



License to Prepare Site

- Specific information requirements in section 4 of *Class I Nuclear Facilities Regulations*
 - (a) *the site evaluation process;*
 - (b) *site's susceptibility to human activity and natural phenomena,*
 - (c) *the proposed program to determine the environmental baseline characteristics*
 - (d) *the proposed quality assurance program, and*
 - (e) *the effects on the environment and the health and safety of persons from activity – mitigation strategy*
- = requirements are not clear – is the license application the same as the environmental assessment, how much detail is needed?

Public Participation – Notices and responses

CNSC rules require notice to the public **60 days** before a hearing (notice form/location is discretionary)

If you want to participate in the hearing you **must** file a submission (“notice”) and request to intervene with the commission within **30 days**.

Supplementary material can be filed 7 days before.

The onus is on you to request application documents from CNSC as soon as you see the notice. Information will *not* be posted online.

First task: check and make sure documents referenced in the material are sent to you as well.

Public Participation – Intervention in Licensing

- **Rule 19** provides that the CNSC may allow persons with an interest in the matter or with expertise to intervene, in the manner and to the extent it sees fit.
- notice/request to intervene must establish interest and/or expertise

The bottom line: your ability to participate and the extent to which you participate is entirely at the blessing of the CNSC.

You have 30 days to review thousands of pages of technical information.

Public participation in hearings

What to expect? Historical:

- CNSC will let just about anybody intervene. However you will only get about 10 minutes (sometimes less).
- **The good, the bad, the ugly:** No clear rules of evidence so questionable statements are commonplace. Evidence is not under oath. Not cross examined. No verification of hearing evidence.
- **Poor rules of procedure:** CNSC staff or company are asked to reply to intervenors, but they don't get to reply back. CNSC staff sometimes do not address the evidence they are responding to.

Canadian Nuclear Safety Commission - Issues

- Mandate confusion:
 - What is it? A policy body to promote nuclear energy or a health and safety watchdog?
 - Minister's directives, lack of independence, informality all suggest it has a policy mandate.
 - Nuclear Safety and Control Act: health, safety, environment risk management.
 - What is the frame of reference for deciding what risks are "reasonable"?
 - Does CNSC regulate all aspects of nuclear facilities and materials or just some?

Canadian Nuclear Safety Commission - Issues

- Commission is tasked with affecting people's rights:
 - Risk management mandate means some "reasonable" risk always remains.
 - There is no safe dose of radiation
 - Danger of malfunctions, accidents
- Deciding people's rights requires fairness:
 - S.7 of the *Charter of Rights and Freedoms*
 - But how much fairness?
 - Are CNSC rules enough?
 - Unresolved issues

Canadian Nuclear Safety Commission – Problems

- Independence? Bias?

Energy Probe case: (Fed CA, 1984) rules of bias don't apply?

- *Keen* case (2008-2009):

President appointed at pleasure, Keen fired for shutting down Chalk River NRU reactor.

- After Keen

Replacement makes statements saying nuclear poses “no risk” promotion of nuclear initiatives.

New ministerial directives – expanded policy mandate.

=increasing shift away from adjudicative tribunal to policy organization.

Bill C-9 – the federal budget bill

Bill C-9 – currently in second reading in Parliament

- Idea is that CNSC would conduct its own comprehensive studies from now on.
 - Comprehensive studies to fit into license process in some way (to be determined)
 - No requirement to consider sending to a review panel.
- Participant funding now allowed for CNSC hearings.

The results?

- no more “public” consultation, only “interveners”?
- Mixed process of environmental assessment and licensing = even more confused mandate?
- No more independent review panels for new nuclear plants?

ENVIRONMENTAL LAW CENTRE



Nuclear Energy Regulation

Part II - Provincial

**Laura Bowman
Environmental Law Centre**

April 13, 2010



Federal versus Provincial roles?

- Nuclear power plants are declared works for the “general advantage of Canada”
- Feds have exclusive jurisdiction over “integral and vital parts” (e.x. labour relations) but the province has the power to “affect the operation” of a nuclear plant if the thing regulated is not “in relation to” the work. (*Ontario Hydro case*)
- Environmental laws are normally laws of general application not *in relation to* a nuclear plant. (*Beaver Smith case*, *CPR v. Ontario case* – but see *NB environment v. CP Ltd.*)
- In theory, so long as a provincial enviro law is not inconsistent with the *NSCA* requirements and does not affect matters “integral” to the operation it applies.

How does the Province fit in?

- Alberta Environment
 - *Environmental Protection and Enhancement Act*
 - EIS
 - Waste
 - Discharges
 - Water Act
 - Use and diversion
- Alberta Utilities Commission
 - Permit to operate power plants in the province.

Alberta Utilities Commission

- *Hydro and Electric Energy Act*
 - 11 No person shall construct or operate a power plant unless the Commission, by order, has approved the construction and operation of the power plant.
 - “power plant” means the facilities for the generation and gathering of electric energy from **any** source
 - Applications are considered by the Alberta Utilities Commission:
 - Public interest mandate: environmental social and economic considerations.
 - May impose terms and conditions, or deny permit.

= Open question, if applied to nuclear plant:
unconstitutional?

Waste sites – provincial or federal?

- Provincial legislation requires permits for waste sites
 - Material is excluded from definition of “hazardous waste” in provincial legislation if regulated by the CNSC
 - Still non-hazardous “waste”?
- CNSC has ruled that provincial waste regulations may still apply to nuclear facilities (Port Hope October 2009).
 - CNSC may regulate both radioactive waste and other hazardous waste under its own regulations.

Provincial environmental laws

- *Environmental Protection and Enhancement Act*
 - regulated activities include: *“the generating of thermal electric power or steam,”*
 - mandatory Environmental Impact Assessment for “a thermal electrical power generating plant that uses non-gaseous fuel and has a capacity of 100 megawatts or greater;”
- *Water Act*
 - use and diversion of water for industrial purposes.

Alberta Land Use Framework

- *Alberta Land Stewardship Act (ALSA)*
 - Regional plans to be developed by Cabinet-appointed advisory councils.
 - Upper Peace, Lower Peace, Upper Athabasca regions established.
 - Move to regional environmental impact assessments – what activities will be allowed in the region?
 - Decisions about what projects will be allowed in the region, regional objectives for water quality, air etc.
 - Provincial Cabinet discretion
 - will bind all decisions under other provincial legislation.

Recap

- **Environmental Assessment (federal) is important**
 - Need, alternatives, cumulative effects
 - focus on environmental effects
 - Minister is accountable
 - funding, process and panel reviews usual.
- **Federal (CNSC) licensing process**
 - Intervention process is open and flexible
 - mandate, standards and rules of evidence are an obstacle to determining “reasonable” risks
- These two processes will be merged if C-9 passes

Recap

- **Provincial role is uncertain**
 - can province decide whether a plant is built?
 - can utilities commission or environment Minister require changes or reconsider issues about water use, waste, design
 - Are CNSC and utilities commission process compatible?
 - Will province be involved after/during CNSC license?
 - Combined environmental assessment?
How will federal process interact with regional planning and cumulative effects assessment provincially?

Questions?

Thank you

Laura Bowman

Lbowman@elc.ab.ca