

SUBMISSION TO
ED BYRNE, MINISTER OF NATURAL RESOURCES
RE
“DEVELOPING AN ENERGY PLAN FOR NEWFOUNDLAND & LABRADOR”
BY
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17 JANUARY 2006 – AURORA HOTEL

We Are Pleased To See The Government Of Newfoundland And Labrador Finally Putting Together A Comprehensive Energy Policy. We Agree With Four Of The Five Principles Of The Plan But Worry About How The Mandate Of Newfoundland And Labrador Hydro Will Be Expanded. We Would Not Want To See It Granted A Monopoly, Thereby Stifling Competition In The Energy Industry, That Could Only Be To The Detriment Of The Consumer.

Grand Riverkeeper Is Dedicated To The Protection And Preservation Of The Grand River, (A.K.A. Churchill River) Its Valley And Watershed. We Advocate Sources Of Clean, Sustainable Energy And Alternative, Sustainable Economic Development - Development That Respects The Environment And Maintains Ecological Integrity For Generations To Come.

It Is From That Perspective We Cannot Support Your Governments Proposed Hydro Plans For The Lower Part Of Our River But, On The Other Hand, We Wholeheartedly Support More Environmentally Friendly Projects Such As The 1000 Megawatt Height Of Land Wind Park Announced Today By Ventus Energy And The Metis Development Corporation.

Your Proposed Lower Churchill Hydro Project Will Only Add To The Environmental Legacy Of The Upper Churchill. Impoundment Of Water Behind Dams At Gull Island And Muskrat Falls Will Create Two Reservoirs; Effectively Destroying What Is Left Of Our Free Flowing River. This Is Going To Have Major Environmental Impacts And Will Change The Ecology Of The Whole Region. Further We Wish To Point Out That These Are Not “Essentially Run-Of-The-River Facilities” As Claimed In Your “*Climate Change Action Plan 2005*”.

For Your Understanding Please Let Us Elaborate:

Run-Of-The-River Facilities Has, For The Most Part, No Impoundments So The Water Must Be Turbined As It Arrives From The Catchment Area (The River). In This Type Of Facility Electricity Generation Cannot Be Regulated And Rises And Falls With The River’s Flow.

- **According To *Restructured Rivers 2001* By Philip Raphals Of The Helios Centre In Montreal, If There Are Impoundments Then The Storage Capacity Should Be No More Than 48-Hours.**
- **In The *Green Energy Study For British Columbia Phase 2* The Following Is What They Consider A Description Of Run-Of-The-River Hydro “Run-Of-The-River Hydro Implies That There Is No (Or Minimal) Storage Reservoir. The Instantaneous Flows That Are**

Passed Through The Power House Are Essentially The Flows That Occur In The Stream At The Intake And Flows Downstream Of The Powerhouse Are Virtually Identical To Pre-Development Flows.”

- Also In The Same Report Under A Heading Called *Dams* It States, “Technically, Any Blockage Of A Watercourse Could Be Considered To Be A Dam But Not Every Dam Would Exclude A Project From Being Green. The Green Rating Relates To The Amount Of Water Stored And Whether There Is Significant Impoundment Of Water.”
- As Well In The Kyoto Protocol’s *Clean Development Mechanisms* The Executive Boards States: “...To Conform As Run-Of-The-River Hydro ...The Nominal Installed Capacity Of The Project Must Be Below 15 Megawatts.”
- In Order To Meet British Columbia Provincial Standards To Be Considered “Clean”, Run-Of-The-River Projects Are To Be “Not More Than 50 Megawatts And The Stream Flow Passing Through The Powerhouse Must Be Basically The Same As The Natural System Flow” Implying That There Is Minimal Reservoir Storage.
- The Gull Island And Muskrat Falls Facilities Do Not Qualify As Run-Of-The-River Projects, Nor Will They Qualify As “Green” Projects Because The Impoundment Area Will Be Two Very Long Lakes.

The Government’s Proposal Is For Storage Hydro Where Production Can Be Timed To Correspond To Periods Of Peak Demand Meeting The Utilities Obligation To Provide Service At All Times. In The Case Of The Gull Island Dam You Will Create A Reservoir 155 Miles Long. It Might Be More Appropriate To Call The Facility “Run-Of-The-Reservoir”.

With Regards To Large Hydro, The *Canadian Environmental Assessment Agency* States The Following On Their Web Site:

There Are Many Known Social And Environmental Impacts Of Hydro Projects;

1. Mercury Contamination
2. Water Level Fluctuations
3. Reservoir Sedimentation
4. Changes In Water Quality
5. Affects Biodiversity
6. Socio-Economic Impacts On Aboriginal And Other Local Communities
7. Extremely Costly On The Environmental Assessment End Because Of All These Impacts
8. And We Added This One Ourselves: Decommissioning Of Old Dams At End Of Their Time Is At Present Not Included In The Initial Costs. If We Are Serious About Sustainability, And Leaving Future Generations As Well Off As We Were, We Must Include In The Costs Side Of The Books, The Projected Cost To Future Generations To Dismantle Or Repair Old, Dilapidated Dams.
9. As Well- According To This Same Source, Additional Impacts Are Imposed By Climate Change;
10. Several Degrees Of Global Climate Warming Will Affect Dams And Their Output.
11. Changes In Precipitation Patterns
12. Accelerated Snowmelt
13. Changes In The Magnitude And Frequency Of Flooding.

- 14. Changes In River Flow
- 15. Changes In River Patterns
- 16. More Changes In Water Quality
- 17. And Changes In Energy Supply And Demand.

Because Of These Many Environmental And Social Impacts, Large Hydro Projects Are On The Decline In Most Areas Of The World. International Rivers Network, (Talking About Large Projects In Brazil) States---“Without Public Subsidies, Companies Are Unwilling To Put Their Own Money On The Table To Construct Hydro Electric Dams. Large Dams May Go The Way Nuclear Power Has Gone In Brazil, As A Form Of Energy Whose Real Costs Make It Too Expensive To Rely On As An Energy Source.

In The United States, The Epa Has Not Approved Large Hydro Dams For Years. In Fact, Decommissioning Is More The Trend These Days.

Even China Has Just Scrapped 9 Of 13 Dam Proposals Because Of Their Environmental Impacts.

So, Why Are We Still Considering Destroying An Entire River System When Much More Environmentally Friendly Alternatives Are Possible?

Wind Energy: Your Current Energy Discussion Paper Does Not Give The Attention To Wind Energy That It Deserves.

According To The U.S. Research Institute: “ The 2004 World Energy Outlook Predicts That In 2030 Wind Power Will Be The Second-Largest Source Of Renewable Electricity After Hydroelectricity.

In British Columbia, The District Of Squamish Released A Paper Called *Wind Power: An Alternative Energy Opportunity*: In It They State “Wind Technology Is The Fastest-Growing Generation Source In The World. By The End Of 2002, There Was An Estimated 31,000 Mw Of Wind Energy Installed Throughout The World. “ ...“The United States Is Experiencing The Largest Surge In Utility-Scale Wind Development Since The 1980’s” And “More Than 11 Billion Kwh Of Electricity Was Generated Last Year, Enough To Supply 1.1 Million Homes” Also, It States- “The Production Of Wind-Generated Electricity Emits No Greenhouse Gases Or Other Harmful Air Or Water Pollutants, Has Shorter Construction Lead Time, Has The Ability To Be Modular, Meaning, More Turbines Can Always Be Added If Loads Grow, Has No Fuel Costs, No Air Emissions And Higher Customer Approval.” “Wind” They Say, “ Is A Perfect Complement To Hydro Power. When The Wind Is Blowing, Water Could Be Stored Behind The Dam. And When It Is Calm, It Could Be Released To Generate Power At The Dam. Wind Turbines Generate Their Power When It Is Most Needed. Winds In Canada Are Stronger In The Winter, So Power Generated By Wind Turbines Is Higher In The Winter. Wind Also Generates More Power During The Day Than At Night, Which Matches Peak Loads.

The Canadian Wind Energy Association Report *Federal/Provincial/Territorial Council Of Energy Ministers’ Meeting July 19, 2004/ Iqaluit, Nunavut* Has A Table, Which Shows The *Emerging Provincial Initiatives On Wind Energy.* Of The 10 Provinces, Newfoundland And Labrador Show “No Specific Policy In Place”. All Other Provinces Show Much More Action On Wind Energy.

Minister Byrn, Your Energy Plan Discussion Paper States That The Costs Associated With Alternatives Are Too High At Present; But The Canadian Wind Energy Association In Ottawa States The Following; “In Good Wind Areas, The Costs Of Generating Electricity From Wind Ranges From 6 To 12 Cents Per Kwh. While This Is Still Somewhat Higher Than Other Energy Costs, Wind Energy Has No Fuel Costs And Operating Costs Are Continuing To Decrease Every Year By 3-5% Partly As A Result Of Greater Efficiencies And Economies Of Scale. In Contrast, Most Conventional Generation Costs Are Going Up And Steadily Increasing. Natural Gas Prices Are Making Wind Power Economies More And More Attractive.

It Is Past Time For The Government Of Newfoundland And Labrador To Get On The Wind Band Wagon And Pay More Than Lip Service To Developing Specific Policies On Wind Generation In The Province.

Conservation;

We Also Notice That Not Much Attention Is Paid To Conservation. Policies And Regulations Must Be Added To This Energy Plan That Force Conservation. An Example Would Be Initiatives To Promote Better Insulation In Homes, And Initiatives To Discourage Use Of Vehicles Like Hummers And Gas Guzzling Suv’s.

To Conclude:

- 1. The Environmental Impacts And Costs Of Mega Hydro Projects Like Those Your Government Proposes To Build On The Grand River Are Far Greater Than The Benefits That Will Accrue To Labrador.**
- 2. You Are Hereby Asked To Remove From All Government Reports, The Description Of The Said Project As “Run-Of-River” (Implying It Is Low Impact), Because This Statement Is Misleading To The Public And Is Tantamount To An Outright Lie.**
- 3. Wind Energy Is Most Definitely A Viable Alternative For Newfoundland And Labrador Along With Conservation, Tidal Energy, Wave Energy, Biomass, Etc. And Your Government Must Pay More Than Lip Service To These Alternatives In Your Energy Plan.**
- 4. Finally, As The Areas Only Public Environmental Group, We Ask That In Future We Receive Up Front Notice Of These Types Of Meetings In Order To Allow More Time For Preparation (Over And Above Your Nov. 10 Press Release Stating That Community Consultations Would Begin In Early 2006).**

Thank You For Listening.

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