



BCUC Transmission Inquiry 2009-10

Some Electricity Statistics:

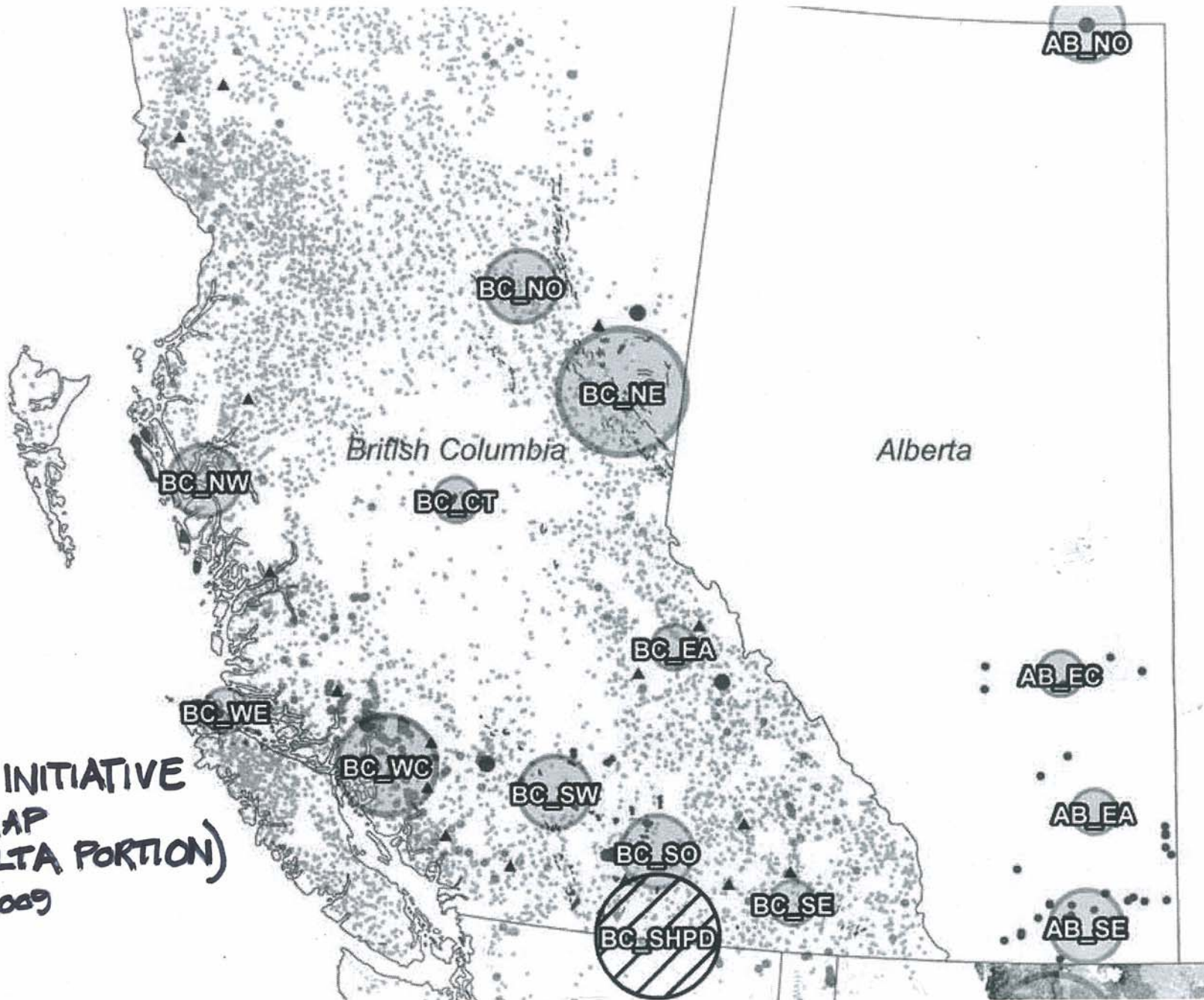
- Current BC electricity demand: **58,000 GWh/yr**
- Forecast 2026 BC electricity demand (before demand-side management): **73,000 GWh/yr**
- BC Hydro mandated “self-sufficiency” by 2016: **4,400 GWh/yr (average)**
- BC Hydro mandated “insurance” by 2026: **3,000 GWh/yr**
- Site C hydro project (Peace River): **4,600 GWh/yr**
- Liard River hydro project: **24,825 GWh/yr**
- Iskut River hydro project: **4,293 GWh/yr**
- US market for clean electricity: *to be assessed*
- Alberta market for clean electricity: *to be assessed*

WREZ Initiative – BC energy potentials*

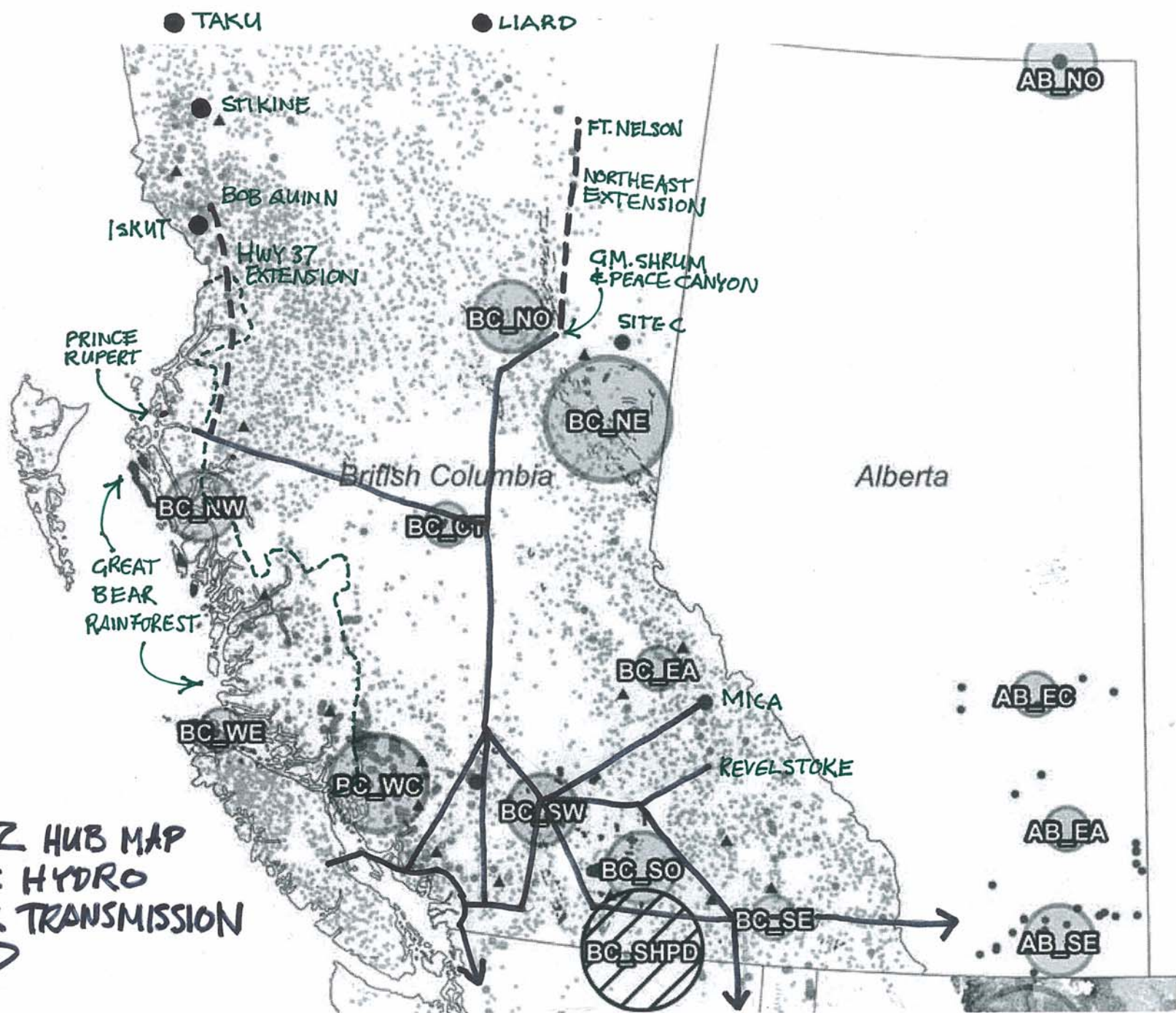
* cost screen not known; resource screens unclear; environmental screens not applied (except legally protected areas)

- **BC_CT: 2,868 GWh/yr – Wind; (biomass)**
- **BC_EA: 911 GWh/yr – (hydro; biomass; geothermal)**
- **BC_NE: 17,265 GWh/yr – Wind; hydro (Site C ?); (biomass; geothermal)**
- **BC_NO: 6,738 GWh/yr – Wind; (hydro; biomass)**
- **BC_NW: 5,999 GWh/yr – Wind; hydro; (biomass; geoth.)**
- **BC_SE: 1,432 GWh/yr – hydro; biomass; geothermal**
- **BC_SO: 6,455 GWh/yr – Wind; (biomass; hydro; geoth.)**
- **BC_SW: 5,663 GWh/yr – Wind; biomass (hydro; geoth.)**
- **BC_WC: 14,914 GWh/yr – Hydro; geothermal (biomass)**
- **BC_WE: 3,766 GWh/yr – Wind; (biomass; hydro)**
- **BC total: 66,010 GWh/yr**
- **“BC_SHPD”: 15,797 GWh/yr “shaped energy product”**

WREZ INITIATIVE
HUB MAP
(BC & ALTA PORTION)
JUNE 2009



WREZ HUB MAP
+ BC HYDRO
BULK TRANSMISSION
GRID



Possible Goals and Outcomes:

- Thorough modeling of resource potentials, *with* environmental sensitivities (including LRMP data; cumulative effects)
- Credible assessment of export potentials, addressing displacement of GHGs
- Inclusion of demand scenarios with radical alternatives, e.g. vehicle electrification
- Assessment of costs & increased loads for Hwy 37 extension & northeast extension



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