Alberta Geothermal Resource Development Act



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May 11, 2021



Geothermal Resource Development Act

- Alberta No. 1 Geothermal Project, M.D. of Greenview
- Geothermal Resource Development Act, SA 2020, G. 5.5
- Definitions s. 1(g) Regulator is the AER
- Purposes of the Act s. 3
- Well licence requirement s. 7



Alberta Geothermal Legislation

- Oil & Gas Conservation Act
- Need a well licence to rework existing oil and gas wells –
 s. 8
- Granting well licences, suspension & cancelling licences, inspections, investigations, avoiding damage to wells – ss. 9 – 13
- Well abandonments, continuing liability & costs ss. 14 –
 25
- Successor Liability



Alberta Geothermal Legislation

- Offences fines \$50,000 \$500,000 s. 28
- Several existing Acts have been amended to address geothermal energy development
- Environmental Protection Enhancement Act site reclamation
- Mines & Minerals Act legal rights disputes Rights to steam?, water rights?, oil and gas rights, other mineral rights (brines and hard rock minerals)?



Alberta Geothermal Legislation

- Oil and Gas Conservation Act amended
- Pipeline Act amended
- Responsible Energy Development Act amended



B.C. Geothermal Legislation

- First and most comprehensive provincial geothermal legislation - 1983 B.C. Geothermal Resources Act
- Geothermal Resources Act, R.S.B.C. 1996 c. 171



B.C. Geothermal Regulations

- Geothermal Geophysical Exploration Regulation, B.C. Reg. 358/98
- Geothermal Operations Regulation, B.C. Reg. 79/2017
- Geothermal Resources General Regulation, B.C. Reg. 39/2017



B.C. Geothermal Resources Act

- s. 1 Definitions "geothermal resource"
- s. 2 B.C. Government owns all geothermal resources
- s. 5 Minister absolute discretion over granting of permit and can impose conditions



 s. 6 - Permit size – maximum "block" as defined in the Petroleum and Natural Gas Act



Surface Rights - B.C. Geothermal

 Surface rights dealt with as in the B.C. oil and gas industry



Geothermal Geophysical Exploration Regulation

- Oil and Gas Commission under the Petroleum and Natural Gas Act
- The Geophysical Exploration Reg. under the Oil and Gas Activities Act applies to geothermal



Geothermal Operations Regulation

- Test hole requirements
- Restrictions on drilling near permanent buildings
- Restrictions on drilling near subsurface mines and underground storage facilities
- Well spacing



Geothermal Operations Regulation

- Well casing requirements
- Proper disposal of drilling fluids
- Blowout prevention (BOP) requirements
- BOP equipment testing and maintenance



B.C. Geothermal Operations Regulation

- Daily drilling reports
- Release of information
- Well plugging, abandonment and reclamation requirements
- Monthly production reports



B.C. Geothermal Resources General Regulation

- Well reports & data
- Exploration & permitting fees
- Permit renewals
- Lease fees
- Core samples
- Release of information
- Environmental Protection & Management



AB Geothermal Resource Development Act

- Sections 26-27 of the Act provide that the AER may make rules and regulations - STAY TUNED
- Decades of BC geothermal regulatory experience should provide some guidance for Alberta – the B.C. regulations provide a useful reference point



Collaboration with U of C Experts

- Dr. Roman Shor can provide more details
- Canadian Institute of Resources Law, Faculty of Law
- Thank you
- Questions?