
A Regulator's Perspective

Renewable Electricity Conference

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- The Alberta Utilities Commission
- Types of regulation
- Micro generation regulation
- Power generation regulation
- Future: “Where did my monopoly go?”

- Alberta's public utilities regulator.
- An independent, quasi-judicial agency of the province of Alberta that ensures the delivery of Alberta's utility service takes place in a manner that is fair, responsible, and in the public interest.
- Public utility regulation in Alberta dates back to 1915. The AUC is currently celebrating a century of public utility regulation.



Types of regulation

- ❑ Economic regulation
 - Employed to address or correct the lessening of, or failure of, competition in a market.

- ❑ Technical regulation
 - Imposed when it is necessary for market participants to cooperate in order for the competitive market to function efficiently and effectively for consumers.

- ❑ Non-market policy regulation
 - Imposed when a market, regardless of the state of competition, is producing outcomes not considered by society to be acceptable.

Micro-generation regulation

MG regulation was passed in 2008, effective on January 1, 2009.

The intent of MG regulation is for customers to be self-sufficient by allowing customers to use **renewable resources** (e.g. solar, wind, etc.) to generate environmentally friendly electricity and receive credits for surplus generation.

AUC was tasked to implement the regulation and create a process to deal with applications, disputes and complaints. AUC Rule 024 was created in June 2008.

The MG regulation was reviewed in 2013 and the expiry date was extended to December 31, 2015.

Micro-generation regulation

MG requirements

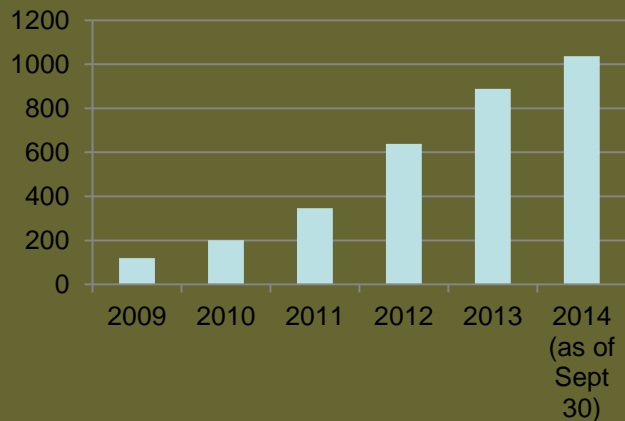
- i. Exclusively uses sources of renewable or alternative energy;
- ii. Is intended to meet all or a portion of the customer's electricity needs;
- iii. Is, at the time of construction or installation of the generating unit, sized to the customer's load or anticipated load or a portion of it, as evidenced by a total nominal capacity of the generating unit that does not exceed the rating of the customer's service;
- iv. Has a total nominal capacity not exceeding 1 MW; and
- v. Is located on the customer's site, on a site owned by, or leased to the customer that is adjacent to the customer's site.

Micro-generation regulation

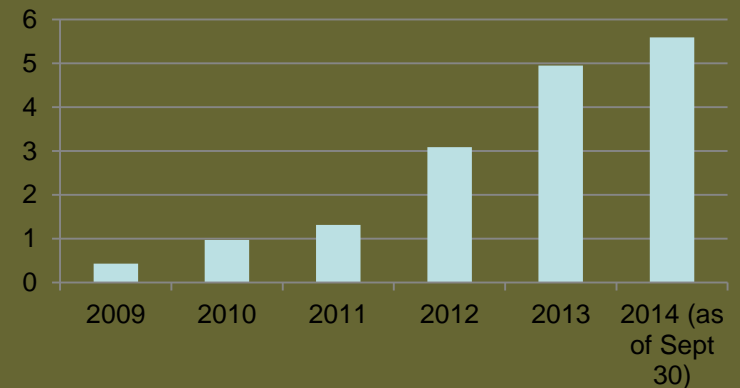
Micro-generation statistics

	# of MG sites	Installed capacity (MW)
2009	119	0.43
2010	201	0.97
2011	346	1.31
2012	639	3.09
2013	888	4.95
2014 (as of Sept 30)	1036	5.59

of MG sites



Installed capacity (MW)



Bull Creek wind project - AUC Decision 2014-040



- 115MW (46 2.5 MW turbines) project near Provost
- First major wind farm hearing in Alberta (2 weeks)
- Biggest issues: noise (including infrasound and low frequency noise) and health
- Opposed by 25 area residents
- 21 expert witnesses

AUC Jurisdiction

- S. 11 HEAA

No person shall construct or operate a power plant unless the Commission, by order, has approved the construction and operation of the power plant.

- Section 17 AUC Act

The Commission must consider if approval of the Power plant is in the public interest having regard to its social, economic and environmental effects.

AUC Decision 2014-040

Noise

- Project met nighttime noise requirements.
- Any infrasound produced by the project will be inaudible at nearby residences.
- Any Low frequency noise produced must meet AUC requirements.
- Proponent required to do post-construction monitoring.

AUC Decision 2014-040

Health

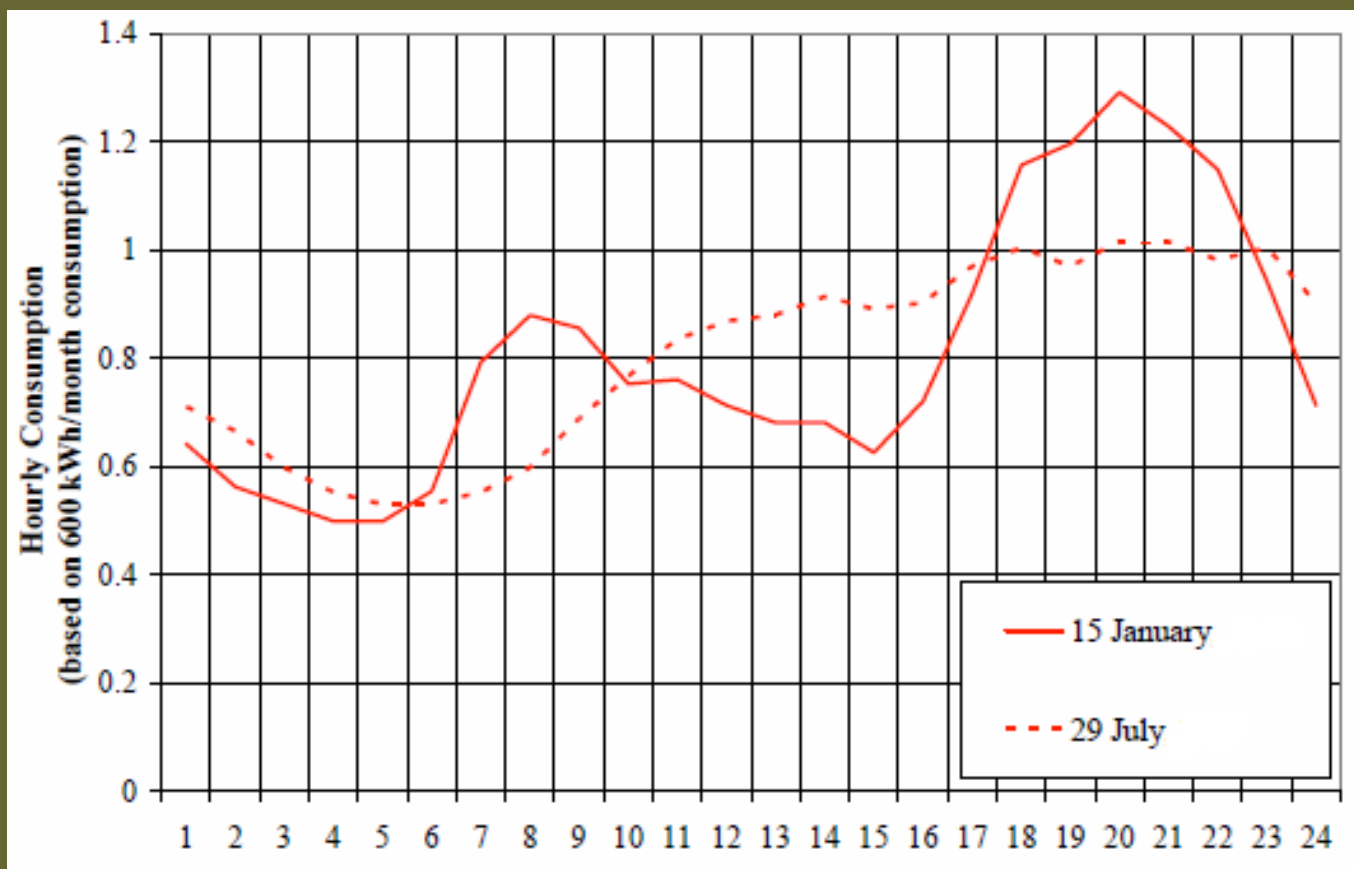
- Commission's nighttime noise limit of 40 dBA consistent with World Health Organization's nighttime limit and will prevent sleep disturbance.
- Health concerns from low frequency noise and infrasound likely to be produced by project not supported by evidence.
- Project may cause stress and annoyance for some residents.

AUC Decision 2014-040

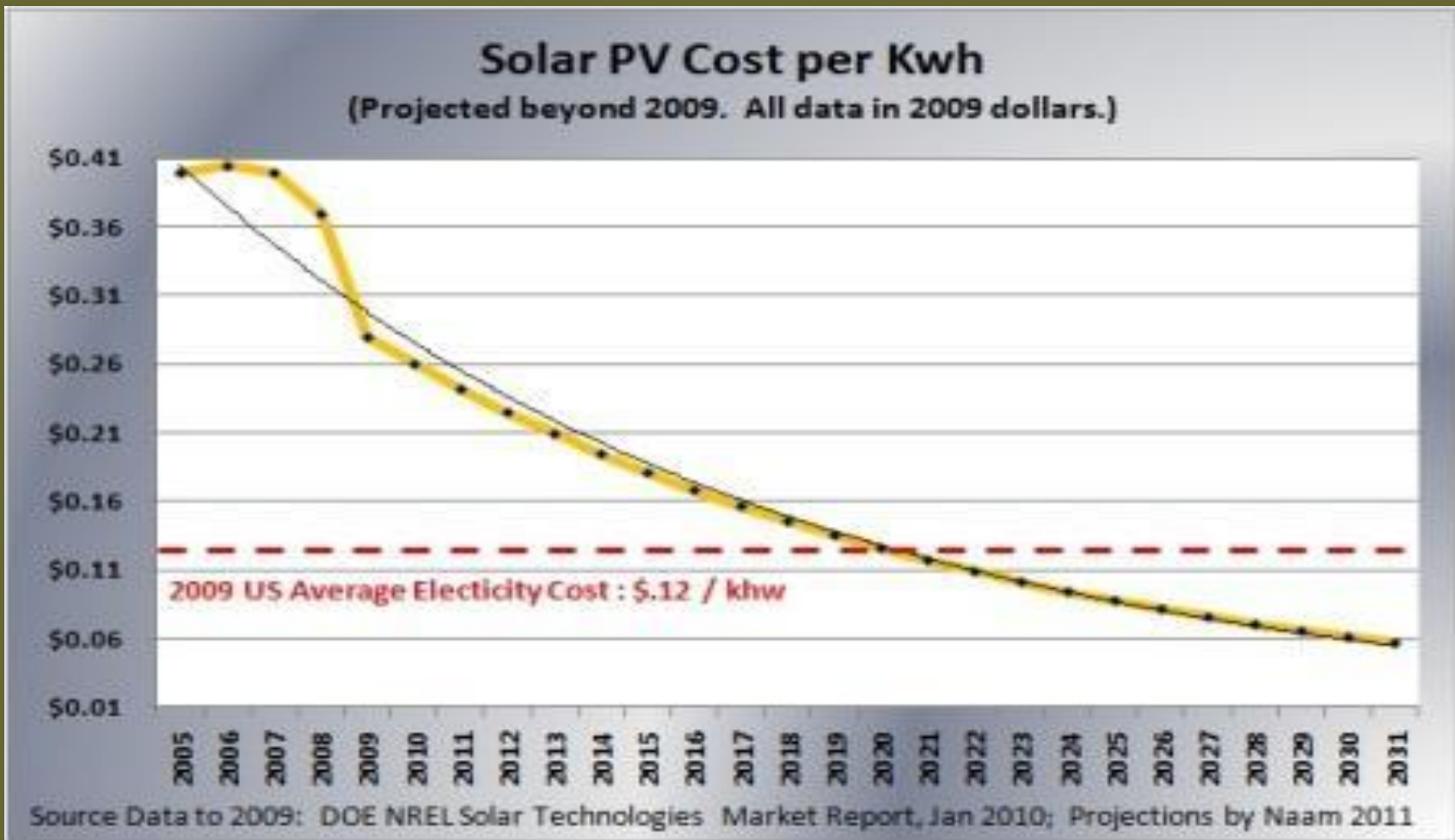
Future: “Where did my monopoly go?”



ENMAX Calgary Residential Load Profiles

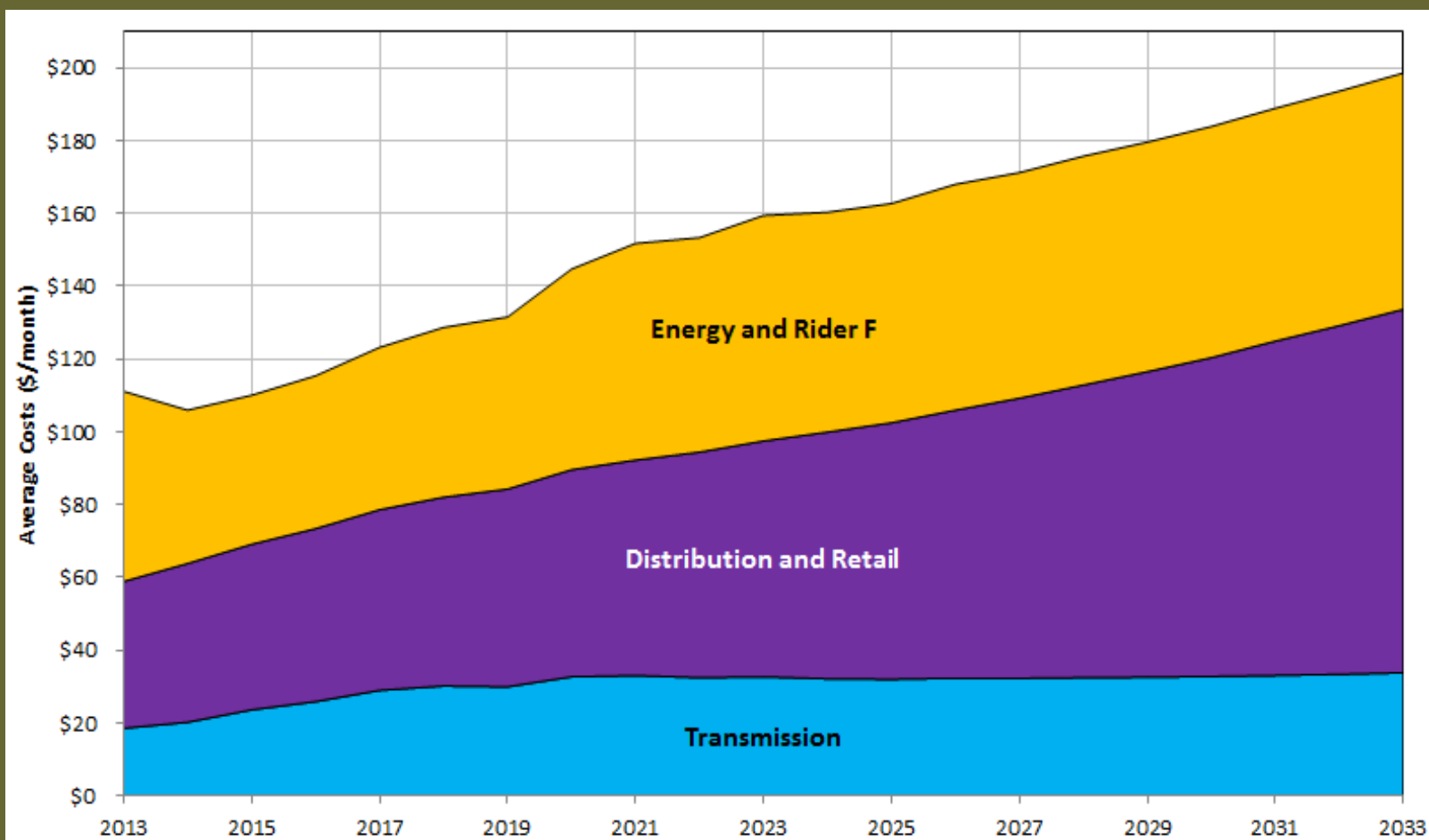


Future: “Where did my monopoly go?”
Price of solar



Future: “Where did my monopoly go?” *Wire rates*

Average delivered costs of electricity (\$/month)
Residential (600 kWh/month)



- Cost of connecting distributed generation/micro-generation to the grid**
- Eligible technology**
- Capacity limits**
- Compensation (retail rate, avoided cost, market price, FIT)**
- Banking spilled generation**
- Cross subsidization on wires tariffs**

Thank You

