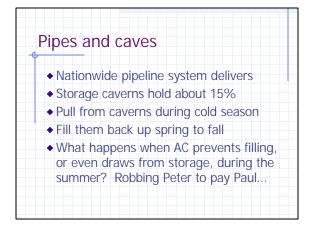
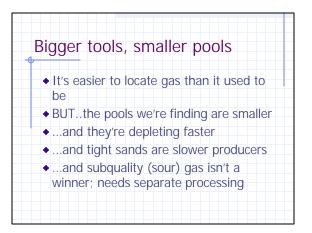


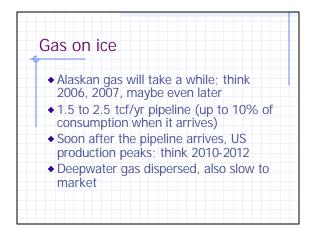
60%, • And y	port oil from overseas (about including products) es, we import gas from Canada	
	es we import das from Canada	
(3.5 t	cf/yr, 16%)	
impor	nly 1% of gas comes via LNG ts (up to 3% in two years when d LNG ports are demothballed)	





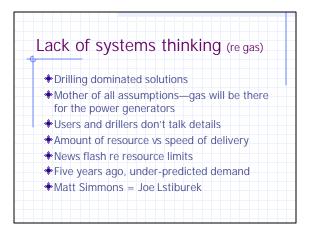
R	aging depletion
4	• "Don't go there"
4	Started out with Estimated Recoverable Resource (EUR) of about 2000-2150 trillion cubic feet (tcf)
4	We've consumed 950 tcf
4	There are 1050 – 1200 tcf left (including "undiscovered" and subquality gas)
	On a treadmill

Drill baby drill	
 320,000 gas wells (1 per 900 people) 900 US rigs drilling for gas vs. 200 drilling for oil (1 per 320,000 people) 	
 Most of Canada's 550 rigs also seeking gas Personnel problems (mergers, retirements) 	
 Rigs are rusty; cannibalizing old for new Drilling to 6,000' vs. 19,000': 5-10 times slower 	
WCS Basin: big pools are deeper	



The Canadian Card
♦We use half their gas
They have lots in their frontier zones (some off east coast; more in the Yukon)
Some are starting to complain about prices, debate the Deal with The Devil (NAFTA)
If they ever change their minds about exports, we're in <i>deep</i> trouble
*Recently changed about exporting electricity
Export limit is projected at 5.5 – 6.0 tcf/day





P	rices (re gas)
Ť	 Volatility, higher price band (\$3.50 - \$6.00) vs. \$2 pre -2000, \$3.75 ave. for 2000
	Demand can respond faster than supply Demand <u>destruction</u> Farmland Industries: shut down some fertilizer plants Potato flake factory in Center(CO) Competition between consumers (esp. elec.)
	 North American supplies will eventually peak (30tcf/yr vs EIA's projected need of 39 tcf/yr)
	 Price problems in advance of that peak Shouldn't we take the long view?

Think energy system (like "house as a system")	
 Crude oil: supply/demand/price = volatile Non-OPEC (depletion) vs. OPEC (control) Weak conventional wisdom (forecasts) Electricity: only gas can "move fast" Investors: "old" vs. "new economy" World factors: growth, demand shifts, environmental wild cards 	

	oming energy policy debate
	Previous policies long on talk, short on wisdom and action
	Past efforts aimed at cheap gasoline, two-ca garages and plenty of pavement
+	Notion of geologic limits absolutely discounted, refuted: "crazy aunt in the attic"
	Drill bit gets \$\$\$ breaks to find fossils
1.4	Technology uber alles