

D. Lease Sales: When, where, how much, what &
why?

Summary on risk sharing

D Timing Lease Sales.

Mostly recap.

1 a) Select lease procedure

2 b) Rank by ripeness.

This is roughly by value, ^{here first} but not entirely.

Anticip. $\% \Delta$ value of PV of state's share.

This shd. be laid out specifically, explicitly by DNR.

"High interest" by indy is not enough.

3 c) Basic sales criterion: $\% \Delta V = i \cdot t$ Deduct all costs, this argues for later. Resist pressure of those whose incomes are our costs.

4 d) i = state's borrowing rate. (over)

6 e) (State pays no tax on cap. gains, can accept low rate) Set min. price. PHHC found where all bids were rejected. They were higher next time.

7 f) Give some concern to steady flow but mostly this

8 g) automatically. Artif. steady flow helps major more, overcome disincl. of scale. Give some wt. to regular stability. Stretch out over longer pd., to avoid big ebb & flow whole state.

9 h) Watch Fed. reg.

Discr. vs. old oil.

Reverse grandfatherhood principle.

Shade toward later sales.

Use sovereignty as much as can.

Cite Kaiter figs. on peak & end, various schedules.

(To p. 2)

Resolve tenure problems quickly.

Native over claims

Fed. drainage

State selection. Select oil lands

Drainage cd. force permanent leasing

Be aware that indy. has much less int. than state in waiting for higher price: int. on pipeline.

Beware thinking hi price will screen out lean firms. It is long waits that screen them out. You can reduce size of units.

Beware hurry's to avoid higher future costs. No cost is rising like price of buses. Swanton R. oil, \$1.50 wellhead price, 1961, 15 yrs. ago, 15% return to waiting.

Beware customers who want to capture, who will force too early.

Beware sooner who see value of map files as fugacious asset. State owes them nothing. ~~Set~~ If state forces ~~low~~ pre lease expln. Time that ^{the} same way

~~h-f~~ (cont.)

Coord. w. Fed. lease sched. Pet. 4 first, ^{but} Ak. gets 90% royalties. But reduces Fed. incentive - Ak. might get more by giving some away.

Bear in mind finding elsewhere, revaluation of extent leases is major Δ to new reserves, not new discoveries.

Special considn.
may tax hi for 10 yrs.
new leases.

To recoup losses from PB,
Then reduce taxes, & sell

Pipeline creates adverse int. between state & owners.

Owners want to keep it full. They are only paying themselves when they pay rates, and costs are fixed -- i.e. $MC \ll$ rates -- so value of oil to owners is FOB Valdez; value to state is at Prudhoe.

✓ State $\therefore$ has more leverage on net value. Much less interest in early flow. (a hi-revenue tax on Prudhoe $\therefore$ wd. be OK)

Deferred leasing OK.

Of course the earlier leases ^{may} ~~will~~ get prior rts. to pipeline choke. But they'll run out, & oil demand keeps rising. And Cong. favors new oil. Etc.

State has much greater int. than indy. in waiting for higher price. Indy. is the one w. need for steady flow.

Response: a) Re older leases, raise tax -- & do it on an a specific, per bbl. basis.

b) Re new leases, hold for higher price.

Alaska ideas

1. Claimstaking. Is there any in Ala? There was, when priv. people filed for claims on BLM land.

Today, land not declared competitive is given to claimstaker, & gather.

✓ Production requirement is like prior approp.

Applicants influence time of lease by their nominating. They want to rent it down early, right after they have scanned it.

✓ They buy it when it is worth little. They lose nothing by premature prodn. for if they waited, value wd. be higher, bcs:
a. More competitors; b. Seller is stronger financially, less thankful.

So, indy. will be pushing for early action. It is for owner to hold back.

Prospector lays out big ^{front} money, wants quick action. Uses political power, & publicity, & control of info. by modeling and influence on mind-sets, to push for early leasing.

Leases interest is to have sale, ~~and~~ on bonus bid basis, before steep part of growth in value -- steep to growth, that is. And that is when value is near zero.

A hard push by indy. for early bonus sales is:

an indication that State should hold, let prices rise.

✓ As to small operators, they can compete better later, when lead-times are shorter -- even tho prices are higher. Because on a PV basis, advancing the sale date raises price to them disprop., bcs. of their higher i.

If bid were on royalty, big few wd. not gain from holding during rise? all bid high, then wait for Δ rent to justify high %? Big few cd. bid higher, bcs. cd. wait longer. Of course if there were no bonus, anyone cd. wait a long time.

Easy solution here, on surface, is to require prodn. to begin in few years. Then you must say how much prodn. And can you decide when you want to begin? You could have royalty rate rise only at 10% or so

But then soon have prohibitive rate; & at any rate, high-grading begins immediately.

Royalty is not self-regulating - you must say what the price is. Now they are exp. profits to refineries. Assessing reserves involves same problem but no more so than royalty.

✓ Info. depreciates. It may leak, be stolen, duplicated, improved on. So eos. will nominate prematurely.

Cal. O & G (or DNR) has waited for a high show of indy. interest before comp. leasing. But how high is

✓ high? They need a criterion ... max DCF, widely understood, & correct.

✓ They need to screen out wrong criteria:

- State need for money.
- Convenience of indy.
- Local multipliers, gross.
- Local impact, negative (unless netted from gross make.)
- Env. as overriding criterion
- Higher future costs (unless incorp. in MDCF anal.)
(See RIMS)
- Hi demand (at suppressed price)
- Maintaining "non-contention"
- Keeping indy. here, & interested.
- Need to create jobs

Early exp. may also help indy. claim larger areas.
Higher rents mean smaller units, more intensive devts.
are feasible, as a rule.

When costs are hi relative to price, it requires large volume
to pay for one well.

Here we bring in time, volume as flow vs. fund.
after 20 yr. life, volume doesn't much help a well pay.

So hi flow per well is what is meant, or shd. be.
A deep well must be wide, too. But m.e.r. limits that -
how? Is it per well, or what?

✓ Easy G.'s use of MER betrays backwardness. At the
least, an adjusted, modified MER is required - one
that dists. structures & wells. A well declines from
start, but continuous dev. drilling sustains "field" prodn.
until 50% of reserves have been produced. (Olan.
Norman, of Conoco, in Adelman, Brulley & Norman, '71.)
pp. 306-07.

✓ ✓
Kahn, '64, said excess cap. was not of reserves, but
of wells. due to intensive development drilling - caused by
pricing. ~~I forgot~~ A ~~good~~ half-good by-product of bad
policy! Kahn sees overdrilling of devt. wells as big problem,
and bias vs. expln! Counter to my thesis - watch this.

D

Lease sales

Problems of uncertain tenure.

Native over claims

Drainage at boundaries

Bias to premature sales found in using gross, rather than net, as measure of benefit. Res. grows grows at smaller % - no leverage. Attracting bus, making jokes

Premature sale as lead time, reduces no. of bidders

Best first.

Beware Canadian Hi Arctic fiasco

Cite Kalter's attempt to forecast when prodn. wd peak & end, various lease schedules.

Relations to Feds: have slowed them down a little, esp. big push before Ford left office. But they'll be back pushing, probly.

Atk. gets a share of Fed. revs. from Pet & royalties. Ca. 90% in 1969-70 (PLLRC p 77, 80). This may explain low level

of Fed. enterprise on Pet. 4 cfd. to OCS. On Pet. 4
Feds. have no comp. bidding - stayed w. old system, uplands.
Is little incentive for national public to spend on geologic
survey. PLLRC p. 80.

Proably Ak. shd. push Feds toward Pet 4 first, OCS
later.

~~the~~ Time pref. of people wanting early contracts & payrolls is
problem.

Who's wanting to force gas lines? Customers, buyers. Why -
to preempt gas. Even tho lines are premature - best of that,
they don't cover int. in to.

Who pays? Seller, in lower price.

PLLRC found that when all bids were rejected, and tract
later offered, there was more bidding & higher offers the 2d time.
(pp. ? —)

To say that progressive expln. of lands is an objective
is to make a means an end. The end is to make PV.
Expln. must be timely.

Need Drainage Treaty w. Feds & Indians, to keep that from
unduly influencing timing. However, if Feds prove field, that often makes
it ripe for our leaving anyway. Esply. if they put in xptn.

D Lease sales

E Procedural

Need to rank lands in order of ripeness. (or feasibility)
Criteria for ripeness - slow future growth.

Staff needs. An est., resources. Present
approach just maps state lands.

Emphasize: ~~the staff~~ Until Leg. is prepared to
support a substantial staff, like a major oil firm.
forget about getting its share.

1 Lease sales

Wait until buyers are hungry.

Now, are ~~layers of~~ several uncertain links in chain of xptn:

Pipeline, quality, rates, etc.

Tankers — big new flap, hazard of spills.

Unloading — env. cost

Sale

Overland pipeline

also, preferred option is to produce faster

Pro deferring lease sale. Fed. future dissem. vs. old oil is avoided by retarding ^{opening - day} on-stream day. Revenue grandfatherhood principles applies.

2-price system is a blunt instrument — the world is full of them — surgery w. a broken beer bottle.

But it tends to exploit grandfatherhood — the privileges too freely granted to and offset them.

Consult R.M.S.

D

Biases toward prematurity

1. claim staking. Now modified into nomination. Early prospectors force early lease sales.

They buy early; and have to begin producing. So their adaptation is to produce slowly. Wellhead prices, ~~and~~ (2 more wellfoot values) are rising as they produce. (Same effect as lower i.) Revaluation of old discoveries is primary Δ to new reserves ca. yr.

Gentlemanly majors may tend to stay clear of the other fellows' territory, for a while.

Establishing a position - involves more than a lease. Must find xpts, markets, refining sites, routes, terminals, etc -- each step a hassle, & getting harder.

Exploiting superior info., advance info., a fugacious resource.

Drainage has been an effective weapon to force divided local owners into leasing. This cd. explain resistance to unitization. The weapon is still usable in Alaska.

They say Prudhoe will last 27 yrs or so (Van P.) But how about the Longjumeau-Horman principle, where most new reserves come from revaluation?

Freezing out rivals is bound to be attractive to majors - and they are bound to deny it. Rivals for leases, terminals, routes,

and finally customers (3 firms dominate each mktg, e.g.)

Limiting access to indy. resource base is almost instinctive. They probably take it for granted & don't even think of it as anti-social.

They get their return more as cap. gain. Now that deple. all. is gone, this is big way to avoid tax impacts.

Deple. all. encourages produ. Expensing expln. only encourages acqu. (This must add to price ~~1~~ today, & shortage problems)

Prematurity of Prudhoe shown by difficulty of placing output. Learning got ahead of demand.

Utilities expanding to keep up rate base. [A-J Effect].
Financing expln. - do they in Alaska?

An appreciated lease gives you cash w/o ~~paying~~ taxes, by borrowing. In effect you sell it, cash in. (See how debt of Arco, ~~the~~ BP, Sohio have risen)

You can expense geol. cost not resulting in lease acqu;
and bonuses for abandoned leases.

Also expense dry holes. Bias is vs. producing wells.

✓ Giants who sometimes use extinction pricing (gas wars)
may also bid up leases as cheaper route to same end.

D - Lease sales

F

C, 4

~~10~~

~~Leasing & Taxes.~~

Pipeline rating & taxes.

To min. lessee K needs, begin w. low rates, ~~less~~ let them rise.

Present structure is reverse.

Lower pipeline taxes wd. be passed thru in higher royalties & bonuses.

New leases cd. stipulate lower haul rates based on lower line tax. This might be non discrim. if pre-announced, so lease bids are higher.

✓ Maybe more workable is to tax pipeline for 1st 10 yrs. of PB prodn. Then remove tax, lower rates, and issue new leases

A big lag in new sales lets you tax PB w/o spoiling new leases

Timing lease sales

Vert. intd majors, w. edge in xptn., will favor early sales (& slow prodn.)[‡]

Sell no leases until State can guarantee common carrier xptn. to any firm.

Small sales in steady flow may be better for lease indeps? Dubious. It is dinosaurs who need that. Interlopers thrive on stopping & starting, in-and-outing.

Alto. had (has?) frequent regular small sales, says J-Rod.

Swanson R. wellhead price, 1961, \$1.50 bl.
1977, if new, \$10-13/B.
 $\frac{12}{1.50} = 8$, in 15 yrs. a 15% annual Δ .

[‡] Opt. prodn. schedule starts later & ends sooner

Tinny Sales

~~the~~

You can ~~put~~ recover the stolen horse and also
lock the barn door by defining new leaves.

1) Reuse taxes on o & g.

2) Exempt new leaves

3) Then leave.

1 clear

1. Ind. is pushing hard for early sales in Beaufort. Why?

a. Time will bring in more competitors, more who ~~have~~ will run more shot lines.

b. Time will raise prices so they must bid more. They must figure now, value growing faster than i. Those there now are the strong, who can put value on things before others do.

c. They need to keep pipeline full.

d. They need to keep crews busy? Not likely, but they ~~will~~ contract out the work.

e. They have money to reinvest.

f. If a lot is sold at once, they can buy cheaper.

2. Kleppe scheduled lease sale. 10/77.

Hammond countered w. sched. dividing sale into 3 parts.

- Inshore ~~lease~~ areas, 10/77 OK

- "Shear zone", 4/81

- Deepwater area, defer until better tech. available.

Art Kennedy, Kleppe's top aide in Ark. hinted Kleppe wd. bend some to Hammond's plea.

Kleppe said gas pipeline is so big an issue it shd. involve ~~the~~ joint decision of Pres. & Congress.

Arnold Kleppe pushing for bigger Parks & Wildlife lands in
Ak., doubling area.

Sees big, permanent enrgl. base in tourism. I
doubt this --- presupposes continued cheap energy.

D Timing Sales

Criterion: $\frac{\Delta MPV}{MPV} = i$

Initiative: DNR sieze, set own priorities (Malvolio)

Drainage: Action is forced (~~Malvolio~~)

Even flow: achieved automatically by $\frac{\Delta MPV}{MPV}$

Notice: Adequate

Advance info: Abundant, published

Flexibility, to change rate of produ.

Capital to face new produ.

If recover K from PB in 10 yrs. you can adjust rate of new produ. faster

And you tie up K a shorter time (even tho it takes more K_0 to do it.)

Of course you can also speed flow by adding wells later. But later wells have short, short useful lives and are quite uneconomical.

Fast recovery subjects a hi % of yr. produ. to redesign each yr.

Also makes it more ex. to slow recovery. Higher % is retired ea. yr.; less K is sunk to pay off ea. yr.

At. shd. avoid imposing rigidity by fixing produ. rates by law. It is need for reserves.

D Timing

Wrong criterion: max. gross activity.

Pressure to lease prematurely will come from suppliers of intels.

E.g. Fontana Steel cherishes ltr. of intent from pipeline contractors re line to Midland, Tx.

Orgd. boondoggling, corporate leafraking.

Price ceiling is breaking. Emergency sales of gas.

Fri. Jan. 14 '77, FPC approved emergency sale from Houston Pipeline Co. to Transmont., & to United Gas. Price: \$2.15/mcf

71¢ above nat. ceiling on unreg. gas, or \$1.44

(OPEC can't take much blame for this Δ gas price, from — what? — \$.31/mcf. A 5 or 6 fold Δ . Dave Schwartz to blame)

60 day emergency sales are allowed, above ceiling.

APGA, Am. Pub. Gas Ass., is protesting.

Houston Pipeline sold emergency gas to same 2 cos. in Nov. & Dec., also. FPC authorized "extension" on Jan. 5, but Houston declined, fearing this might put them under FPC jurisdn. So new order was required.

Anyway, price ceiling shd. break. Back to back 60-day emergency orders are now a possibility.

Same time, current demand in Ca. is meetable in other ways. Cal. subcomm. on energy, chaired by Terry Gossin, says Assy.

that Pac. Ltg. has understated reserves. Pac. Ltg & PG&E have a common sub, the Pac. LNG Terminals. Went to import 25% of Cal. daily supply as LNG from Indonesia) Ok.

Goggins says only one LNG site needed by 1985.

gas study shows 70 of land acqu. as share of costs is zooming.

This is doubly signif. as we go to more remote areas, previously unprod. You'd expect now land costs to become a larger share.

Ok. hasn't yet reached this stage. Better hold out until it does.

Rank all areas by "ripeness" — i.e., by % Δ MPV anticipated.
Lease in order

Selling too much reduces no. of bidders on ea. tract, reducing compn. Ok. has sold much for \$1/a or so. Lost control for nominal price.

Revenue grandfatherhood for seller is not really revenue: it is grandfatherhood for buyer. Buyer has appropriated rt. to receive service at low price. It's won basically by front money: early bonus, early development.