

Alaska Economic Report

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LNG imports: 30% bump in natural gas cost

No alternatives to imports, utilities say

There appears to be no near term in-state option for supply of natural gas to offset the expected decline in Cook Inlet production. That's what Enstar Natural Gas Co. and Chugach Electric Assoc. said at a constituent meeting held in Anchorage last week by State Sen. Elvi Gray-Jackson. Enstar CEO John Sims said his company's contract with Hilcorp Energy for gas purchases ends in 2033. Hilcorp's contracts with regional electric utilities end sooner. There is additional gas in Cook Inlet but getting it is complicated. Plans must be made soon for liquefied natural gas purchases and deliveries, both utilities said, to assure regulators and consumers that there will be sufficient supply available.

While Chugach Electric and Matanuska Electric Associations can partly supplement natural gas with renewable energy from hydro, wind and solar,

Enstar's customers depend on gas for almost all heating of buildings, Sims said. *The price impact on gas rates are estimated at about 30%, Sims said. Arthur Miller, CEO at Chugach Electric, said his co-op estimates that LNG imports will cause rates to rise by 10%, though it could be lower. Chugach's impact is less because it supplies part of its gas needs from the Beluga gas field where it is part owner, and also has access to hydro power from Bradley Lake, near Homer. Matanuska Electric Association believes the impact on its rates could be 13% to 20% depending options chosen. Enstar's impact won't be felt until its contract expires in 10 years but the gas supply gap then will be substantial. Effects on electric utilities will come sooner.*

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Construction wages, nonresident employment on the rise

Strong growth in Alaska construction and the tight labor pool have combined to push average construction wages up to \$51.96 per hour in July compared with \$44 per hour in January, 2023. That's according to a Department of Labor and Workforce Development presentation to the Resource Development Council's annual conference last week.

On a national level, by comparison, construction wages went up from \$35.70 per hour to \$38.28 per hour over the same period. Although it's across the total Alaska workforce, nonresidents working in Alaska increased from 21.4% of workers in 2022 to 22.5% in 2023. Petroleum and federal infrastructure spending is pushing up construction employment.

Energy:

Cost shock on rural power projects

Rural energy projects have rapidly increased in cost, resulting in a growing deferred maintenance tab for village power houses and bulk fuel storage, the Alaska Energy Authority has told the Regulatory Commission of Alaska. Federal infrastructure grant programs through the Infrastructure Investment and Jobs Act and the Inflation Reduction Act do not cover these kinds of costs because they are fossil fuel projects, AEA said. Rural powerhouse upgrades now cost \$5 million to \$7 million, up from \$3 million to \$4 million. Similar problems occur with bulk fuel storage replacements, which now cost about \$11 million each, AEA said.

This has resulted in a deferred maintenance backlog of about \$1 billion on the rural bulk storage tanks and about \$300 million on rural power systems.

Battery storage will reduce gas use

The \$65 million 40 megawatt Battery Energy Storage System, or BESS, installed by Chugach Electric and Matanuska Electric associations will reduce natural gas use by about 5%. The BESS is mainly designed to keep the regional power grid stable against short-term interruptions (it can power the grid for up to two hours in a total blackout) but it also reduces reliance on “spinning reserve,” or the gas-fired power units kept idling as backup. Reducing this is where the savings on gas use comes from. The BESS can be expanded to 70 megawatts.

Natural gas storage: Chugach is also investigating gas storage in unused reservoir space in the Beluga gas field where it is part-owner. The goal is for 20 billion cubic feet of added storage.

Natural Gas:

Cook Inlet supply gap (Cont.)

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There are additional known gas deposits in Cook Inlet, mainly at Cosmopolitan, an oil field near Anchor Point, but developing it will require state financial participation. This is possible but it will take time for BlueCrest Energy, the owner, to work out details. Permitting and construction will also take time. Another company, HEX, is drilling and finding new gas near its Kitchen Lights field in the Inlet, but tests are still underway on how much can be produced. HEX says it also needs relief on the state’s 12.5% royalty, which is a controversial decision for state officials and legislators.

Hilcorp itself says it cannot supply much more gas than that already committed to under its contracts, which are expiring. While there is additional gas there are big uncertainties on whether BlueCrest and HEX can fashion terms for development. There are also technical risks, for example whether new gas wells will perform as expected. Gas from the North Slope would solve the problem, but someone (the state?) has to come up with \$10 billion-plus to build a pipeline. Bottom line: The utilities say they cannot count on these and must continue with LNG import planning.

LNG imports, when they happen, will take at least \$100 million out of the regional economy, Enstar says. The utility now spends about \$300 million a year on purchasing gas from producers, mainly Hilcorp. That will rise by 30% after 2033 to about \$400 million. *Meanwhile, discussions are still underway on how the liquefied gas would be transported and the LNG “re-gasified,” but this will likely be done in Nikiski, on the Kenai Peninsula.*

Housing – a few bright spots amid the gloom

Housing problems have become a national issue and Alaska is feeling the impacts – cost escalation, labor shortages, land availability (in Anchorage, mainly) and local zoning constraints. Alaskans won't believe it but the rapid rise in prices is worse in many states, Bryan Butcher, CEO of the state's Alaska Housing Finance Corp., told the state homebuilders association in Anchorage Nov. 8. Many of his points were also made in the Resource Development Council's annual conference, which followed.

Alaska mortgage repayment rates are good, signaling healthy economy

AHFC financed a third of all home mortgages in the state last year and half of loans for first-time homebuyers, so the performance of its portfolio is a good indicator for the state. Here's some good news: Alaskans with AHFC loans are among the best in the country in making mortgage payments on time. What's helping drive up prices (\$481,000 last year vs. \$375,000 in 2019) is simply fewer houses on the market and homeowners wary of selling homes with very low interest rates on mortgages and having to buy another home at higher rates. Even though rates are coming down (Butcher estimates a 2025 rate at 5%) they are still high.

Some bright spots

One bright spot is the new activity in building new "affordable" homes subsidized for low-to-middle-income Alaskans as well as senior citizens, and housing for professional workers recruited to work in certain rural "hub" communities. Last year AHFC built 18 units of senior housing and, this year, 40 units of affordable family housing. In Valdez 20 units of duplex-style affordable housing are being built. Also, 43 units of new housing and related capital investments in Ketchikan, Sitka, Kotzebue, Bethel and Nome are underway or planned.

Higher loan-to-value ratios; new home energy efficiency rebates

Two new AHFC initiatives include a change in the loan-to-value ratio allowed for first-time buyers with a goal of 97%, up from the current 95%. This is authorized in House Bill 273 enacted by the Legislature last spring. The increase would effectively lower the amount of a buyer's down payment from about \$24,000 to \$14,000, with the balance rolled into the loan. This assumes a 6.5% mortgage on a \$481,000 home (average 2023 price). With this the monthly payment would go up \$61 over the life of the loan. "This puts home ownership within reach of those who can afford the monthly payments but have a hard time coming up with the down payment," Butcher said.

Another new program authorized this year is a New Home Construction Rebate which awards a \$10,000 rebate to buyers of new homes built with a "5-Star" energy efficiency rating. This is something like the popular 2008 state-funded rebate program for homeowners making energy improvements except that it applies only to new home construction. The Legislature approved \$7 million to fund the rebates, which involves only state money. Foundations for the new homes must be laid after Jan. 2.

Petroleum:

Trump touts ANWR, but industry may be skeptical

Proximity to nearby discoveries, good reservoir rock cited; National Petroleum Reserve-Alaska has better potential, some say

President-elect Donald Trump sees the Arctic National Wildlife Refuge in Alaska, or ANWR, as a great oil tank that can supply U.S. and even Asian oil needs. The oil and gas industry may have different ideas. For years politicians, led by Alaska's congressional legislation, have touted ANWR as a great undeveloped energy resource. U.S. conservation groups fought fiercely to keep drill rigs out of the refuge and mostly succeeded, even in years of Republican presidents and congressional majorities. Most of the 19.6-million-acre refuge is classed as formal wilderness, the most restrictive federal land classification. However, 1.5 million acres of its northern coastal plain has potential for major new discoveries, state and federal geologists say, and is proposed for leasing under the federal jobs and tax cuts act passed under the first Trump administration in 2019.

Some geologists feel the geologic potential is overrated, however. The results of the first of two lease sales authorized under the 2019 law came in 2021 and saw disappointing results, with no bids by major companies and offers only from a state of Alaska agency and a small independent as well as an Alaska real estate company. A second lease sale now planned in December will test the industry's appetite once again now that a champion – Trump – will be back in the White House. The results may be similar to 2021, however.

The Alaska Industrial Development and Export Agency, the state agency that bid for leases in 2021, will make offers again, it says, but conservation groups are sure to file lawsuits. That may dampen industry's interest even with a pending Trump presidency. Also, this sale, required by the federal jobs and tax cuts law, takes place under restrictions set by President Joe Biden's Interior Department. Those might be difficult for Trump to undo.

More fundamentally, however, are differing views among geologists about the potential of ANWR. Alaska state geologists cite the proximity of the coastal plain to state-owned lands not far to the west where discoveries have been made. Marwan Wartes, in Alaska's Division of Geological and Geophysical Surveys, says the area has what's needed for discoveries. There are reservoir rocks with open pore space and permeability is seen in surface rock outcrops and deep "source rocks" where decomposition of organic material generates hydrocarbons that seep upward into potential oil traps. That's shown by oil seeps at the surface, Wartes said. Some of the surface rocks are so stained with oil that they can be set on fire, said Roger Herrera, a retired BP geologist who worked in the area.

Source rocks, oil seeps don't guarantee economic oil deposits

However, those things don't guarantee oil can accumulate in economic oil deposits. Wartes acknowledged that little seismic has been done and only one exploration well has been drilled on private lands owned by Alaska Natives. The results of that are still confidential but Chevron and BP, the companies who drilled the well, have since relinquished their subsurface rights.

Still, the discoveries on state lands just across the Canning River, the western boundary of ANWR, point to ANWR's prospectivity. ExxonMobil discovered its large Point Thomson condensate find a few miles west of ANWR and BP made its Sourdough oil find right on the Alaska-ANWR border. There's no reason to believe that the favorable geology doesn't continue from the state lands into ANWR, and the regional infrastructure built for Point Thomson condensate production, which includes a pipeline to Prudhoe Bay, should make ANWR more attractive.

However, some industry geologists are still skeptical and that may explain why major companies have shown tepid interest. Richard Garrard, Chief Technical Officer at Borealis Alaska Oil, Inc., an independent, said he first looked at ANWR's coastal plain the mid-1990s. "Despite the hype by politicians, I was not technically impressed," he said. Despite ANWR's oil seeps and good reservoir rocks the geologic structural history of the region argues against the kind of giant oil finds made in the Prudhoe Bay area further west. "Geologically the coastal plain area is not part of the Barrow Arch trend, where the main large hydrocarbon accumulations exist, but an extension of the Brooks Range foothills," the mountain system to the south. Any oil-bearing traps in this area are more likely to be small and broken up," Garrard said. The better potential is further west, in northern parts of the National Petroleum Reserve-Alaska, or NPR-A, the 23-million-acre federal land reserve west of the North Slope's large producing fields.

NPR-A has petroleum-generating systems, reservoir rocks and oil seeps like ANWR, Garrard said, but is right along the Barrow Arch, providing the right geological structural history for major finds. Those are already being made, like ConocoPhillips' new Willow project, which is in the petroleum reserve just west of the large producing North Slope fields. Other petroleum discoveries have been made, such as Pikka, now being developed by Santos Ltd. and Repsol. There is also an offshore discovery at Smith Bay further west, as well as a nearby onshore finds, Garrard said. Those need further drilling. The Barrow Arch extends further northwest along the Alaska north coast and continues offshore. But politics are at play in NPR-A just as in ANWR.

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Petroleum:

Milne Point production expands

Hilcorp Energy plans new drilling in the Milne Point field that will expand its production further. The company told the state Division of Oil and Gas it plans 19 wells, roughly half as oil producers and half to inject water to maintain reservoir pressures. Most of the drilling will be with large conventional “rotary” drill rigs but some will be with smaller “coiled-tubing” units where the drilling is done with flexible tubing mounted on trucks, which is less expensive than drilling with conventional rigs. Hilcorp has been incrementally increasing production at Milne Point through an aggressive development program. The company told state officials that Milne Point production averaged 35,757 barrels per day in 2021; 37,466 barrels per day in 2022 and 39,944 barrels per day in 2023. The company’s latest estimate for 2024 is 43,474 barrels per day, on average.

2026 exploration in Harrison Bay

Two independents, Narwhal LLC and EE Partners, plan to drill two exploration wells in Harrison Bay in 2026 to test Nanushuk and possibly Torok formations, the companies have told the state Division of Oil and Gas. The division recently approved a new unit for state oil and gas leases in the area, which is offshore the producing Alpine field and the National Petroleum Reserve-Alaska.

The companies hold 77,848 acres of state leases that are adjacent to 88,000 acres recently relinquished by Shell in its West Harrison Bay unit. Shell held its acreage for years and felt the area has potential but was unable to secure a partner in exploring the area.

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Exploration in Harrison Bay (Cont.)

Narwhal said it will be evaluating options for rigs and equipment in 2025 as well as reprocessing seismic data acquired in the area. The two companies said they have invested \$6.8 million so far in the project. The Nanushuk geologic formation is known to be productive in areas to the south, where the Pikka oil project is now being developed, and Narwhal and EE believe that it extends north into Harrison Bay, which is in state waters.

Pantheon drills south of Prudhoe

Pantheon Resources is drilling its Megrez 1 exploration well to further evaluate discoveries made south of Prudhoe Bay. The company has been exploring Ahpun and Kodiak, two prospects near the state’s Dalton Highway and Trans Alaska Pipeline System. Pantheon has contracted a Nabors Alaska drill rig for the work. Pantheon built a gravel pad in October near the Dalton to support the drilling. The pad can be used year-around.

Pantheon has been working for several years in the area through its Alaska subsidiary, Great Bear Petroleum. Oil and gas has been discovered and the company is now working to firm up estimates of the resource before making a development decision. The project will involve horizontal production wells and multi-stage fracturing of reservoir rock to increase flow rates.

Hilcorp finalized its purchase of Eni’s Alaska assets and paid \$1 billion for them, Eni told financial analysts. Included is the Nikaitchuq and Ooogoruk fields, which are north of the Kuparuk River field.

Seafood:

Task force tests solutions to ills

Legislative leaders on a task force investigating problems in the state's ailing seafood industry said they will make another push on new money for the Alaska Seafood Marketing Institute, or ASMI. A plan for targeting domestic markets for Alaska seafood was developed by ASMI but Gov. Mike Dunleavy vetoed a \$10 million appropriation made by the Legislature.

The industry is in decline for a variety of reasons including dumping of product by Russia on world markets and sensitivity to food prices by American consumers who hold a perception that seafood is expensive. The Alaska industry declined by \$1.8 billion last year according to research by the National Oceanic and Atmospheric Administration, which regulates the big U.S. offshore fisheries.

Over several days of task force meetings legislators heard a series of alarming statistics including seafood processing jobs declining from 8,500 in 2015 to below 5,900 in 2023, and a sharp drop in locally-owned fishing permits in the high-value Bristol Bay salmon fishery. Locally-owned setnet and driftnet permits declined by 54% and 59% respectively between 1975 and 2023. Permits were being purchased by out-of-state harvesters or those living in Alaska but outside Bristol Bay communities.

The Alaska Fisheries Development Foundation is pushing a modernization plan for the industry including new product development and enhanced marketing. McKinley Research has been contracted for development of a seafood processor business model and cost analysis to be finished next year.

Minerals:

Antimony in Alaska gets attention

Antimony deposits in Alaska are attracting new attention because of its use in high-technology manufacturing and the heavy reliance on China as a supplier for the U.S. Two small minerals companies are currently working on gold prospects with associated antimony. NovaMinerals, of Australia, is in advanced exploration at its Estelle project near Skwentna, in the western Matanuska-Susitna Borough. Felix Gold, a second company also Australia-based, has 20,185-acres of state mining claims on its Treasure Creek prospect near the producing Fort Knox gold mine north of Fairbanks. U.S. Antimony, as U.S. firm, plans exploration in a 4,000-acre area southwest of Tok where an antimony mine operated during World War I.

NovaMinerals and Felix Gold are both hoping for federal grants to help advance their projects, which they say are important for mineral security for national defense. The U.S. Defense Department awarded a grant last year to Graphite One, which is developing a graphite project near Nome that is also considered important for defense.

Petroleum:

Inflation in "oil patch" moderating

Cost increases that hit Alaska oil and operators hard during and just after the pandemic appear to be moderating and some costs are going down, according to sources. Prices for steel tubulars, important for wells and pipeline work, are said to be down about 25% to 30%. For Cook Inlet companies drilling for new natural gas the big concern remains to be the lack of service companies, many who are drawn away from the Inlet because of brisk North Slope activity.

Technology:

3D Printed homes being tested in Alaska; potential to reduce costs

Testing is underway on prototype 3D printed homes in Alaska. An experimental structure was built last summer in Fairbanks and its performance is being assessed through the winter. Alaska Housing Finance Corp. is in a partnership with Fairbanks' Cold Climate Research Center, the National Renewable Energy Laboratory, Xtreme Habitats Institute and the Denali Commission on the project. The city of Nome and the Denali Commission have also received funding from the U.S. Department of Housing and Urban Development to carry out tests in that community. Such innovations won't replace traditional homebuilding but they could reduce costs, AHFC CEO Bryan Butcher told homebuilders in a presentation

Texas firm to operate test data center on North Slope

TA Infrastructure, of Texas, is working with Hilcorp Energy to install a test data center on the North Slope to assess operational issues. Hilcorp will provide natural gas for power generation. The test is designed to run for four years. A permit application has been filed with the state Department of Natural Resources, which is now reviewing it. "We are very encouraged that companies are pursuing opportunities like this in Alaska," state DNR Commissioner John Boyle said. "The Department of Natural Resources hopes to continue to see more opportunities for computing and data center development using Alaska's abundant resources."

Some believe NPR-A more prospective than ANWR (Cont.)

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The areas of the petroleum reserve most prospective for discoveries are near the coast and in wetlands important to wildlife, which attracts the attention of conservation groups who lobby for restrictions.

The Interior Department, under Biden, has adopted restrictive policies, for example by enlarging special protected areas. Garrard said Trump could return these to their original size established by the Clinton administration in 1999, and also undo other restrictive new rules put in place this year by the U.S. Bureau of Land Management. These moves would allow companies to explore and develop a region that Garrard thinks is more prospective than ANWR.

Trump could also undo moratoriums on leasing and exploration in the Beaufort and Chukchi Seas off Alaska's northern coasts. In the 1990s Shell discovered oil in the Chukchi Sea and Unocal and ARCO also made finds in the Beaufort Sea northwest of the ANWR coast. Restrictions by the government including offshore moratoriums by Biden have discouraged further work on these by companies, however Trump could undo the moratoriums.