Deal sets stage for a dramatic jump in solar power production in Alaska

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A renewable energy company has signed an agreement with a Homer utility that opens the door for the construction of what will become Alaska's largest solar farm by a significant amount, people involved in

the project say.

The solar farm, once it's up and running, will also be a small step toward reducing the need in Southcentral Alaska for the Cook Inlet natural gas that could begin running short as early as next year, they say.

Jenn Miller, with Renewable IPP, says the new solar farm will be built near Puppy Dog Lake in Nikiski on the Kenai Peninsula.

With 45 megawatts of capacity, it will nearly triple the solar energy output in Alaska, counting both rooftop solar and existing solar farms, she said.

It will provide power for about 9,000 homes on the Peninsula, and will be more than five times larger than Renewable IPP's project in Houston. That solar farm launched last year, at 8.5 megawatts, making it the state's largest for now.

"There will be over 60,000 solar panels and it will be across 300 acres," she said.

The board of the Homer Electric Association unanimously agreed this week to buy the solar farm's power, the utility announced in a statement. That sets the stage for the project to soon seek approval from the Regulatory Commission of Alaska, Miller said.

The solar farm could begin operating in late 2027, Miller said.

It will double the renewable power produced by the utility, to 24% of its overall generation, said Keriann Baker, the utility's chief strategy officer.

Along with new plans by the utility to replace a gas-generation unit with a more efficient turbine, the solar farm will reduce the natural gas used

by Homer Electric by more than 15%, Baker said. The new gas turbine could also be up and running as early as late 2027.

The utility's reduced dependence on natural gas will help conserve Cook Inlet natural gas needed across Southcentral Alaska, she said.

Enstar, the gas utility for the region, has warned that local supplies of gas from the aging Cook Inlet basin could begin falling short sometime next year. The looming shortfall has sent utilities scrambling to support new renewable projects. They're also looking at importing natural gas to Alaska, a move that's expected to sharply boost electric and heating prices.

"Any gas that we can leave in the existing supply ... is more gas for others to use," Baker said.

Baker said the deal will allow Homer Electric to purchase solar power from the project for less than the cost of natural gas today. The price will be fixed for decades, benefiting ratepayers by reducing dependence on gas that can fluctuate in price, she said.

"For us, it's a no-brainer," she said of the utility.

Renewable IPP and Homer Electric have been working on the project for about three years, Miller said.

She said the project will sit on land owned by the Alaska Mental Health Trust Authority, under a long-term lease.

Miller declined to provide the estimated project cost, but it will be in the tens of millions of dollars, she said.

"Our mission is to diversify the Alaska generation mix, and we want to

do it in a way that suppresses prices," Miller said. "These larger and larger projects are the vehicle to allow us to do that."