

FOR IMMEDIATE RELEASE Monday, November 7, 2022 Contact: Tim Fitzpatrick 907.717.4978 tfitzpatrick@agdc.us

## AGDC SUBMITS ALASKA HYDROGEN HUB PROPOSAL TO U.S. DEPARTMENT OF ENERGY

## Concept Advantages Include Abundant Energy Resources, Carbon Sequestration, Infrastructure, and Favorable Market Proximity

Anchorage, AK (Nov. 7) – The Alaska Gasline Development Corp. (AGDC) today announced that it has submitted a concept paper for an Alaska Hydrogen Hub to the U.S. Department of Energy (DOE). Organizations supporting the AGDC-led Alaska Hydrogen Hub include Agrium U.S., Salamatof Native Association, Alaska CCUS Consortium (including ASRC Energy Services, Santos, and Storegga), and the University of Alaska Fairbanks' Alaska Center for Energy and Power.

Federal funding to create hydrogen hubs was included in the 2021 Bipartisan Infrastructure Law, passed with the support of Alaska's Congressional Delegation and signed by President Biden, and is expected to be awarded in late 2023 or early 2024. DOE envisions selecting six to ten hydrogen hubs and awarding up to \$7 billion in federal funding to support the production and delivery of clean hydrogen energy in support of U.S. emissions-reduction goals.

DOE guidelines require that successful projects will produce a minimum of 50 tons of hydrogen per day, and the Alaska Hydrogen Hub anticipates initially producing more than 600 tons per day, utilizing natural gas feedstock from the Alaska LNG Project and sequestering the associated carbon, eventually growing to 1,600 tons of hydrogen per day in hub capacity. The Alaska LNG Project demonstrated through a comprehensive <u>lifecycle analysis</u> that it is the lowest carbon intensity LNG project in the U.S. The Alaska Hydrogen Hub will support hydrogen ecosystem growth over time from Alaska's abundant renewable energy sources, including tidal, wind, hydro, and geothermal energy.

DOE requires that applicants combine federal funding with project-specific funding. The Alaska Hydrogen Hub concept anticipates using \$850 million in DOE funding along with \$3.75 billion in private-sector funds, backed by offtake agreements from hydrogen customers in the U.S. and Asia.

Alaska has a number of advantages that make the region uniquely suited to host one of the new hydrogen hubs:

Alaska's North Slope is home to North America's largest untapped source of natural gas, estimated at 200 trillion cubic feet, a key component for conventional hydrogen production. The AGDC-backed Alaska LNG Project plans to transport that gas across Alaska for in-state consumption, including hydrogen production, and conversion to LNG for export.

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- The benefits of producing low-carbon intensity hydrogen from natural gas are realized when carbon released in the production process is captured and safely stored in underground geologic formations. Alaska's Cook Inlet, in the center of the Alaska Hydrogen Hub, has an estimated 50 gigatons of carbon sequestration capacity, the best carbon sequestration potential on the West Coast, according to geologists.
- Existing energy infrastructure, including an idle ammonia plant owned by Agrium, is located next to the planned Alaska LNG Project LNG facility. Hydrogen in the form of conventional liquid ammonia emits no carbon dioxide when used to produce energy and is easier to store and transport than hydrogen gas.

**AGDC President Frank Richards** said, "Natural gas is an essential fuel for the U.S. and other nations to achieve future emissions targets, first as a replacement for wide-scale coal use and eventually as a source of zero-carbon hydrogen. Alaska's unparalleled natural gas resources, our existing energy infrastructure and workforce, and our close proximity to U.S. West Coast and Asian markets with rapidly growing hydrogen demands closely align with the DOE's hydrogen hub criteria. Using Alaska LNG as a springboard for launching the Alaska Hydrogen Hub will generate clean, competitively priced energy, create new high-paying jobs for Alaskans, and position the U.S. as a reliable energy partner for our allies overseas."

Alaska LNG and the Alaska Hydrogen Hub proposal have the strong backing of Alaska's federal and state policymakers:

**U.S. Senator Lisa Murkowski** <u>wrote</u>, "The Alaska LNG Project is fully permitted and in an advanced planning stage, and adding hydrogen production to this project enhances and extends Alaska LNG's financial rationale and climate benefits. As the world adds new clean fuels like hydrogen to supplement or replace existing energy supply, Alaska has the resources to continue to be an energy leader for the foreseeable future."

**U.S. Senator Dan Sullivan** said, "Given the current geopolitical and energy supply crises, the Alaska LNG Project has the potential to bring an abundant, long-term, and clean supply of natural gas and hydrogen to Alaska and global markets that will play a critical role in meeting energy supply needs and emissions reduction goals. With Alaska LNG and the Alaska Hydrogen Hub as the cornerstones of the Alaska LNG Project, Alaska has the resources and expertise to be an innovative energy provider for generations."

**Alaska Gov. Mike Dunleavy** said, "Natural gas is a key ingredient for hydrogen production, and the increasing global demand for low-carbon hydrogen is also fueling progress for Alaska LNG. As the world's energy needs change, Alaska will continue to be an energy giant in all forms, including hydrogen. This is an exciting time for energy innovation; we will continue to support Alaska's energy independence."

On October 4, AGDC, along with Mitsubishi Corporation, TOYO Engineering Corporation and Hilcorp Alaska <u>announced a separate agreement</u> to evaluate the commercial feasibility of producing ammonia from natural gas via Alaska LNG and sequestering the captured carbon in Cook Inlet. Alaska hydrogen production was also included in the discussion with Japanese energy leaders during the <u>Alaska LNG Summit</u> in Tokyo on October 24.

## About AGDC:

The Alaska Gasline Development Corporation (AGDC) is an independent, public corporation of the State of Alaska charged with maximizing the benefit of Alaska's North Slope natural gas though the development of infrastructure to deliver gas to local and international markets. More information about the Alaska LNG Project can be found at <a href="https://alaska-lng.com">https://alaska-lng.com</a>. More information about AGDC is available at <a href="https://alaska-lng.com">https://alaska-lng.com</a>.