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Via Email: ken.diemer@alaska.gov

Ken Diemer
Petroleum Land Manager
Division of Oil and Gas
550 W. 7th Avenue, Suite 1100
Anchorage, AK 99501-3560

Re: Kitchen Lights Unit - Fifth Plan of Development

Dear Mr. Diemer:

I am sending you this correspondence as counsel to Furie Operating Alaska, LLC. Enclosed please find the Fifth Plan of Development for the Kitchen Lights Unit ("KLU"), which Furie Operating Alaska, LLC is submitting as operator of the KLU.

If you have questions or would like to discuss this Plan of Development, please contact me at (907) 263-8420 or jon.iversen@stoel.com.

Best regards,

A handwritten signature in blue ink, appearing to read "Jon Iversen", is written over a blue ink stamp of the same name.

Jon Iversen

Enclosure

FIFTH PLAN OF DEVELOPMENT

KITCHEN LIGHTS UNIT

OCTOBER 6, 2017

Furie Operating Alaska, LLC
Operator

TABLE OF CONTENTS

	Page
1. OBJECTIVE	2
2. RESERVOIR CHARACTERISTICS AND MANAGEMENT	3
3. WELLS AND DRILLING.....	3
4. PROPOSED 2018 KLU DEVELOPMENT	4
5. PLANS FOR EXPLORATION OR DELINEATION OF LANDS OUTSIDE PA.....	5

1. OBJECTIVE

This Fifth Plan of Development for the Kitchen Lights Unit (KLU) is submitted by Furie Operating Alaska, LLC (Furie) as Operator on behalf of itself and the other working interest owners to the Department of Natural Resources (DNR) pursuant to Article 8 of the Kitchen Unit Agreement and 11 AAC 83.343. Consistent with 11 AAC 83.343, this plan of development covers the entire KLU for 2018 activities.

Furie conducted substantial well and pipeline work in 2017. Regarding the KLU #3 well, a coiled tubing rig was used to remove the Composite Bridge-Plug Setting Tool that was lodged in the well and retrieve isolation plugs for the Lower Sterling and Upper and Lower Beluga zones. As a result, each of these zones can now be accessed for production. Furie also added methanol injection mandrels to the KLU #3 to combat down-hole freezing. Regarding the KLU #A-2A well, a hydrolog was conducted to determine the source of produced water. In August 2017, Furie conducted an increased flow rate test on these wells, which successfully produced at a combined rate of 31 MMCF/day.

Furie also continued to interpret and evaluate the 3-D geophysical seismic data it acquired during the summer and fall of 2015. These efforts included well-based and seismic-based pore pressure analysis and estimation.

Additional work on the offshore production platform included:

- install Shut-Down Valve on fuel gas skid
- air compressor upgrades
- major generator repairs
- install heat trace, heat trace panel and installation
- install recirculation line on fuel system
- install Haskel pump to break up ice plugs in flowlines or pipeline

In addition, Furie conducted construction activities to stabilize the 15-mile pipeline that runs from the production platform to the onshore facilities. This included having divers install support pins to support the pipeline spool section near the Julius R offshore production platform, and the installation of sand bags under other sections of the pipeline. A cathodic protection (corrosion) survey was also performed on the pipeline.

Work performed on the onshore production facility included:

- re-build of a dehydration unit
- upgrade and review of process and instrumentation diagrams
- upgrade of monitoring systems
- install heat trace and insulation
- inspect dehydration contact tower and install internal distribution piping

Several factors outside of Furie's control precluded Furie from drilling additional exploration or development wells in 2017. The major contributing factor was the lack of any meaningful appropriation to the oil and gas tax credit fund for the purchase of Alaska oil and gas production tax credit certificates. Furie has invested hundreds of millions of dollars in exploring and

developing the KLU and has a very substantial amount of tax credit certificates in the queue awaiting purchase by the state. These certificates are a key component to funding further exploration and development activities in the KLU and were relied on by Furie when putting together its work program and budget. In 2015, the Governor vetoed some of the funding for the purchase of certificates, which created significant uncertainty for investors, making it harder and more expensive for Furie and other small, independent producers to secure crucial funds needed for drilling and completion programs. More importantly, in 2016, the Governor vetoed \$430 million that the legislature allocated for purchase of tax credits, leaving only \$30 million to be distributed *pro rata* among applicants. These vetoes essentially gutted Furie’s sourced budgeted funds for 2016. Indeed, although the Randolph Yost jack-up drilling rig was 100% staffed to commence drilling operations in April of this year, Furie was forced to delay its 2017 drilling plans—including purchasing tangible items with substantial lead-times—until additional funding for the purchase of tax credits was approved by the legislature and Governor. Unfortunately, the State operating budget did not pass until June 22, 2017 and the capital budget did not pass until July 27, 2017—the result was that only \$77 million was appropriated to DOR’s tax credit fund to be distributed *pro rata* among the roughly \$467 million queue of pre-2017 certificates. So again, Furie did not receive the funds it had relied on for its 2017 operations.

Obviously, the amounts and timing of appropriations to the tax credit fund were beyond Furie’s control. Unfortunately, the timing of the passage of the budget bills collided with another issue beyond Furie’s control—the anchor handling tug boat required and reserved by Furie to handle the crucial anchor handling operations for the Randolph Yost rig had to go into dry dock and it left Alaska for Singapore on July 13, 2018 for that purpose. This anchor handling tug boat is critical to drilling operations with the Randolph Yost jack-up drilling rig, because of the anchor system used to set the rig into place. There was no suitable replacement vessel in Alaska, and the Randolph Yost remained fully staffed and ready for operations until the middle of August when Furie was notified that the boat would not return until October, at the end of the drilling season. Given the considerable time and expense involved in bringing a replacement vessel from the Gulf of Mexico, moving forward with drilling operations during the 2017 drilling season was simply no longer an option for 2017. In sum, the lack of a timely resolution regarding funding for DOR to purchase tax credits delayed operations until the anchor handling tug boat was no longer available, and it was not returning to Alaska until the very end of the drilling season.

The objective of this Fifth Plan of Development is to:

- Continue the safe and effective development of the proven gas reserves in the KLU;
- Continue and increase production of natural gas on the Julius R Platform;
- Continue the pragmatic exploration of the KLU.

2. RESERVOIR CHARACTERISTICS AND MANAGEMENT

2.1 Reservoir Characteristics

The geologic formations that Furie has been targeting are the Sterling and the Beluga formations. Multiple pools within the Sterling and Beluga formations have been identified by well logs, geophysical mapping, and flow tests as being productive. Of the multiple pools identified, 28 had MDT log evaluations (19 different sand test points) and five have been flow tested to date (4

of which were proven to be economically viable). Gas samples contained 99% methane. One or more of the tested horizons may be shown to be in communication with other horizons within the same formation.

2.2 Reservoir Management

Furie obtained initial gas production from the KLU #3 well in late 2015. The KLU #A-2A well was drilled and completed in 2016 and is also currently producing. The KLU #A-1 well was drilled but not completed in 2016. The platform is designed to accommodate up to three additional wells, for a total of six wells. Additional wells will be drilled as appropriate to maximize recovery from the reservoir. Well workovers will also be performed as appropriate during the life of the field.

The KLU #3 initially produced from only the Sterling formation as a Composite Bridge-Plug Setting Tool that was stuck in the well prevented production from the Beluga formation. During 2017, the tool was successfully removed and production from all zones is now possible.

Furie's continued efforts to interpret and evaluate the 3-D geophysical seismic data it acquired during the summer and fall of 2015 have provided additional insight regarding reservoir management. Furie plans to continue managing the reservoirs within the field for maximum recovery.

3. WELLS AND DRILLING

Wells have been and will continue to be drilled using a jack-up rig brought to the site for that purpose, and the platform will support a workover rig (platform rig) that may be used for well maintenance. When needed—such as for the well work conducted this year—the workover rig (platform rig) will be transported to the platform and installed using the platform crane, then removed after completion of the well work.

Development wells will be directionally drilled to penetrate development prospects using conventional drilling techniques. The wells will be completed as results justify with single and dual completions. The Beluga and shallower formations will typically be completed with gravel packs.

Furie intends to continue exploration drilling throughout the KLU to the extent it can do so safely while continuing to develop and produce from the Julius R platform. Furie has submitted proposed well locations as part of the plan of operations process and in the interest of consistency Furie does not see a need to revise any well locations stated in the plan of operations at this time. Please note that the wells referenced in the plan of operations are at this point intended to be vertical wells such that the bottom hole locations will coincide with the coordinates provided in the plan of operations. In any event, as previously discussed with regard to the plan of operations, the proposed schedule of wells and their exact locations will likely evolve over time.

4. PROPOSED 2018 KLU DEVELOPMENT

With the installation and completion of the platform, subsea pipeline, and onshore production facility, and ongoing production from the KLU #3 and #A-2A wells, development will focus on additional wells for increased reserves and deliverability. However, existing natural gas market constraints through 2019 may have an impact on the necessity of multiple wells.

Accordingly, Furie proposes the following development activities in 2018:

- (i) Complete the KLU #A-1 well if advisable based on logs, data and market conditions
- (ii) Drill and acquire all necessary logs and data to properly evaluate one new development well in the Corsair block to the stratigraphic equivalent of the Sterling flow tested zones in the KLU #3 well, namely the sand encountered from 6964 feet to 6998 feet measured depth in the KLU #3 well, unless interpretations from the shallower data in a well indicate that producible hydrocarbons are unlikely to be found by drilling to that equivalent horizon depth. Based on the logs and data acquired from the new development well, develop a plan for completing the well and present the plan to DNR.
- (iii) As an alternative to the development well described in (ii), Furie may conduct drilling and evaluation of an exploration well as described below.

5. PLANS FOR EXPLORATION OR DELINEATION OF LANDS OUTSIDE PA

As an alternative to the development well described in (ii), Furie proposes the following exploration activities in 2018:

Provided Furie has enough time and conditions safely permit, use commercially reasonable efforts to either (a) drill and log an exploration well; or (b) re-enter, deepen and log the KLU #4 exploration well.

Furie will continue to interpret and evaluate the 3-D geophysical seismic data it acquired during the summer and fall of 2015.

Looking beyond 2018, Furie intends to continue diligent exploration, delineation and development activities throughout the KLU. This is reflected in the KLU plan of operations for exploration activities that DNR approved in May of 2016. This plan of operations includes wells to be drilled throughout the KLU through 2021, in all of the exploration blocks and into various formations.