From: Rickner, Darryl on behalf of Rickner, Darryl <a href="mailto:Narryl.Rickner@SPR.DOE.GOV">Rickner, Darryl on behalf of Rickner, Darryl <a href="mailto:Narryl.Rickner@SPR.DOE.GOV">Rickner, Darryl on behalf of Rickner, Darryl <a href="mailto:Narryl.Rickner@SPR.DOE.GOV">Narryl <a href="mailto:Narryl.Rickner@SPR.DOE.GOV">Narryl <a href="mailto:Narryl.Rickner@SPR.DOE.GOV">Narryl.Rickner@SPR.DOE.GOV</a>

To: Roark, Christopher; Oosterling, Paul; Gele, Lionel; Habbaz, Roy

Subject: Re: US refiners scorn SPR plan, deny price blame

Date: Wednesday, April 6, 2022 9:44:20 AM

### Super interesting

Sent via the Samsung Galaxy S21 5G, an AT&T 5G smartphone Get Outlook for Android

From: Roark, Christopher < Christopher.Roark@SPR.DOE.GOV>

Sent: Wednesday, April 6, 2022 9:29:40 AM

**To:** Oosterling, Paul <Paul.Oosterling@SPR.DOE.GOV>; Gele, Lionel <Lionel.Gele@SPR.DOE.GOV>; Habbaz, Roy <Roy.Habbaz@SPR.DOE.GOV>; Rickner, Darryl <Darryl.Rickner@SPR.DOE.GOV>

Subject: US refiners scorn SPR plan, deny price blame

Oh goodness......



### (b) (4)

 From:
 Sean Cota NEFI

 To:
 Macintyre, Douglas

 Cc:
 Jim Collura NEFI

**Subject:** [EXTERNAL] Fwd: Update on Northeast Heating Fuel Supply Situation

**Date:** Wednesday, October 26, 2022 2:16:03 PM

Attachments: Energy Trading Loophole Greenberger Article 2022 August.pdf

SeanCota NEFI 2022.vcf JimCollura 2022.vcf

Importance: High

This is a dumbed down communication for hill staff that are not familiar with markets and energy.

Sean

Sean Cota, National Energy & Fuels Institute (NEFI) President & CEO iPhone: 202-843-1000 National Energy & Fuels Institute, Inc. - NEFI - <a href="https://www.nefi.com">www.nefi.com</a>

DC Office: 1629 K Street NW, Ste. 300, Washington, DC 20006 - Phone: (202) 508-3645 MA Billing Office: 36 Jonspin Rd, PO Box 822 Wilmington, MA 01887 - Phone: (617) 924-

1000

Advocacy • Regulatory Compliance • Education • Business Success In Defense and Promotion of America's Main Street Energy Providers

### Begin forwarded message:

From: Jim Collura NEFI < iim.collura@nefi.com >

**Subject: Update on Northeast Heating Fuel Supply Situation** 

**Date:** October 26, 2022 at 1:03:40 PM EDT **To:** Jim Collura NEFI < <u>jim.collura@nefi.com</u>> **Cc:** Sean Cota NEFI < <u>sean.cota@nefi.com</u>>

Northeast Congressional Delegation:

As you know, heating fuel supplies are currently in a precarious state. We thought it important to message you as a group on this.

NEFI CEO Sean Cota (cc'd) is monitoring the situation closely and speaking regularly with our retail members and regional suppliers. **Northeast heating oil and diesel inventories are 63% below the five-year average and at the lowest levels going into the winter we have ever seen**. Since the Ukraine war began and demand for distillate has surged in Europe, the U.S. market has placed a premium on immediate supply for these fuels.

Normally during this time, futures prices for winter months are higher in anticipation of greater demand for heating fuels, a phenomenon known as "contango." Contango is important because it provides incentive to build commercial inventories in advance of winter. The opposite is occurring, however. Futures prices for winter months are currently in extreme backwardation (i.e., futures prices are lower than the current cash price). This effectively discourages wholesalers from building heating oil stocks for fear of

major financial losses this winter. Bottom line is the commodity futures markets, which establish the base price for heating fuels and other forms of energy, is simply not working.

The lack of contango has caused the tightest markets ever. There are reports of heating oil rationing in Connecticut and Rhode Island, and along the Canadian border in New York and Vermont — and it is not even winter yet. Retailers are having difficulty securing commitments from wholesalers for the winter months. Back-up fuel for peak power generation is also at very low levels. In the event of extreme winter weather such as a prolonged cold snap, heating oil will be used for electricity generation in addition tohome heating. Pulling fuel from the space heating market during the coldest winter months could exacerbate the situation significantly.

Note that propane supplies are currently stable but that could change quickly in the event of a U.S. or Canadian rail strike.

Heating fuel dealers do not do well financially in this environment. These mostly small family businesses operate in very competitive markets, which by the way discourages behavior such as "price gouging". Unlike normal retailers, they mark up on a cents-per-gallon basis, not on a percentage-basis. As prices increase their profits decline and lines of credit are strained. Increased cash demands upon loading at the terminal can make it even more difficult to procure fuel. Struggling families find it harder to pay their bills and collections become more difficult, further straining a dealer's credit obligations with his or her banks and suppliers.

Our members will do all they can to ensure everyone stays safe and warm this winter. Many are offering fuel at discounted rates to low-income families, cost-saving fixed price or pre-payment options and budgeting plans. They commonly donate fuel to vulnerable seniors, disabled veterans, and active-duty military families. Many participate in state fuel assistance programs and are helping eligible customers access LIHEAP benefits. NEFI has created a state-by-state list of fuel assistance programs to assist in this effort, available at <a href="https://www.nefi.com/heating-assistance">www.nefi.com/heating-assistance</a>.

While there are few "silver bullet" solutions to this complex situation, below are a few suggestions. These policies may provide some short-term relief. However, a discussion of longer-term measures to bolster regional energy security is urgently needed.

**LIHEAP Contingency Fund:** We commend Congress for including a \$1 billion supplemental in the recent Continuing Resolution. Thank you to all those that helped secure this vital funding! Given the situation in the Northeast, we recommend an additional \$500 million for a separate "contingency fund" to provide targeted relief to states and localities this winter.

**Jones Act Waiver:** The war in Europe is dramatically affecting our region's energy security. We have therefore joined state governors in requesting a

regional Jones Act waiver be issued to help facilitate shipments of heating fuels including natural gas, heating oil, and propane. NEFI is communicating this request to the proper channels within the administration. We understand this is a controversial request, but a necessary one. We welcome any support you might be able to provide for this request.

Heating Oil Reserve: We have urged the Northeast Home Heating Oil Reserve be readied for possible release in the event of an emergency later this winter. We have cautioned against its premature release, as it could worsen the extreme backwardation in the market and further discourage the building of commercial inventories. We do, however, ask that Congress: (1) repeal the one-million-barrel cap on storage capacity included in the FY2012 appropriations bill, (2) restrict any release of product from the reserve to delivery in PADDs 1a and 1b; and (3) prohibit any release of product from the reserve from being exported outside of the United States.

**Futures Oversight:** Fuel dealers are having trouble financially hedging to protect their businesses and customers from extreme volatility. Like in 2007 and 2008, the energy derivatives (i.e., futures and swaps) markets appear to have become "unhinged" from economic fundamentals. As these markets become less and less reliable, so do our hedging programs. We encourage you to read the attached article regarding potential causes and inquire with the administration and CFTC on this matter.

NEFI stands ready to work with you to address this situation in the weeks and months ahead. Sean Cota (cc'd) should be considered primary contact for questions regarding the regional supply situation. We also encourage you to stay in touch with your state's heating fuel associations, which can help address any local or constituent-specific issues that may arise. We are happy to send along their contact information or set-up a virtual meeting.

Let us know if there is anything else we can do to help. Our v-cards are also attached for your convenience.

Best,

--

Jim Collura
Vice President & Director of Government Affairs
NEFI (www.nefi.com)
Tel. 202-508-3645
Cell (b)(6)
jim.collura@nefi.com

NEFI is a non-profit, non-partisan trade association that has proudly served Main Street energy providers since 1942. This message and any attachments should be considered confidential and intended for the sole use of its intended recipients. If you received this message by mistake, please notify us and promptly delete it. Thank you.

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BH WALC

### He Saw Housing Crisis Coming

Now Professor Michael Greenberger exposes Wall Street's role in this year's record fuel prices

### Also Inside:

- HEAT Show Preview
- Tank Monitoring Innovations
- What Voters Think of Energy & Electrification



### The Foreign Interference Loophole

How Wall Street nearly broke the U.S. economy ... again

By Samuel Diamond

On March 8, 2022, U.S. crude oil prices hit \$123.64 per barrel. The price spike was widely regarded as a product of geopolitical crisis; Russia had launched a full-scale invasion of Ukraine, and the U.S. responded by banning imports of Russian oil.

But here's the thing: on March 8, U.S. crude oil stocks totaled more than 411 million barrels. This was slightly below the five-year range, but, according to most market observers, not nearly low enough to inflate prices so much so quickly. (By comparison, the last time crude inventory levels were this low, on January 19, 2018, the price was only \$63.38 per barrel.)

So what happened? Was it excessive speculation, a usual suspect in commodity market disruptions? And, if so, don't those markets have rules limiting speculation?

Yes and no, says Michael Greenberger, a homeland security and financial law professor at the University of Maryland Carey School of Law. Greenberger is best known as one of the few people who predicted the subprime mortgage crisis of 2007-2008. That should have been the last time Wall Street broke the U.S. economy.

Historically, exchange-traded commodity futures have been regulated to bar excessive speculation. However, a major "loophole" has been found in the non-exchange-traded commodities market — also known as the swaps market — which is notionally valued at several hundred trillion dollars per year worldwide.

For the uninitiated, a swap is basically a private hedge that commodity producers and consumer business entities can use to bet on what the price of any commodity, from crude oil to corn, will be at some point in the future. Importantly, swaps traders never use a swap to buy or sell an actual barrel of oil or bushel of corn. All swaps business is done on paper.

The passage of the Dodd-Frank Act in 2010 required for the first time that almost all U.S. swaps would be regulated by the Commodity Futures Trading Commission (CFTC) in a manner mimicking existing rules on exchange-traded



futures, including, most importantly, controls on excessive speculation.

It took the CFTC about three years to implement the Dodd-Frank regulation of the swaps market. The last step in that process was to decide when a swap was a "U.S. swap" and thus regulated by Dodd-Frank, and when it was "foreign" and thus outside of U.S. commodity regulation.

"Ninety percent of trading in swaps is done by four big U.S. bank holding companies — Goldman Sachs, JP Morgan, Bank of America and Citibank — serving as the counterparty, or swaps dealer, to private swaps users," notes Greenberger. "Boilerplate contract language first used in 1992 required these U.S. bank holding companies to 'guarantee' swaps executed by their subsidiaries, including foreign subsidiaries."

Dodd-Frank gave the CFTC oversight of virtually every swap entered into by U.S. banks, whether those trades happened on Wall Street, Main Street or Pluto.

But there's a catch.

In July 2013, after over 50 CFTC Dodd-Frank rules were finalized, the CFTC issued an 84-page, triple columned "Interpretive Guidance and Policy Statement Regarding Compliance With Certain Swaps Regulations," advising when a swap should be considered a U.S. swap or foreign swap.

Reflecting the statutory language of Dodd-Frank, the CFTC document made clear that a swap executed under the auspices of a U.S. bank holding company or any corporate entity therein, or a swap that includes U.S. counterparties or otherwise has a meaningful impact on the U.S. commodity markets, would be deemed a U.S. swap regulated by Dodd-Frank.

In what was clearly an aside, Footnote 563 (of 620) stated that Dodd-Frank does not apply "if a non-U.S. swap dealer ... relies on a written representation by a non-U.S. counterparty that its obligations under the swap are not guaranteed with recourse by a U.S. person." This was already widely understood due to the aforementioned standard contract language.

In August 2013, major U.S. swaps dealers seized on this single sentence within Footnote 563 and — without telling the CFTC or any other regulators — changed the boilerplate language of existing and future swaps contracts. The new contract language eliminated any guarantee given by a U.S. person, including the four major U.S. bank holding companies. The swaps dealers then internally took the position that swaps owned by a foreign subsidiary of a U.S. holding company are not regulated.

"In practice, what this means," according to Michael Greenberger, "is that a swap governing all commodities fully negotiated and executed in the U.S. by the big U.S. bank holding companies — even with a U.S. counterparty — but thereafter 'assigned' to a non-guaranteed foreign subsidiary, is suddenly deemed by

these huge swaps dealers to not be governed by Dodd-Frank."

Greenberger says that "almost everything about these swaps relates to the U.S. except when they are fully executed, they are sent off to a foreign subsidiary."

The CFTC caught wind of this practice during the Obama era and in October 2016 proposed a rule that would have put the kibosh on the big banks' deguaranteeing practice. However, the final rule could not be completed before Trump took office in January 2017. Under his administration, the proposed rule was withdrawn and financial regulators went a step further in affirming the banks' interpretation of CFTC swap rules.

Because purported "foreign" swaps are not governed by controls on excessive speculation, these markets are dominated by parties that do not care at all about actual commodity prices paid by wholesalers, retailers, and their customers. "There is no beneficial tension between producers wanting the highest price and consumers wanting the lowest price," Greenberger says. "Speculators, who do

not care what the price is, dominate these unregulated markets."

Like other futures contracts, swaps aren't inherently bad. The market instrument was created for hedging by commodity users, the businesses that buy and sell oil or corn. "The problem we saw in 2008, before Dodd-Frank, is that when no swaps were regulated, the oil futures markets were dominated by speculators and oil went to its world record high of \$147 a barrel," Greenberger says. "The markets went crazy."

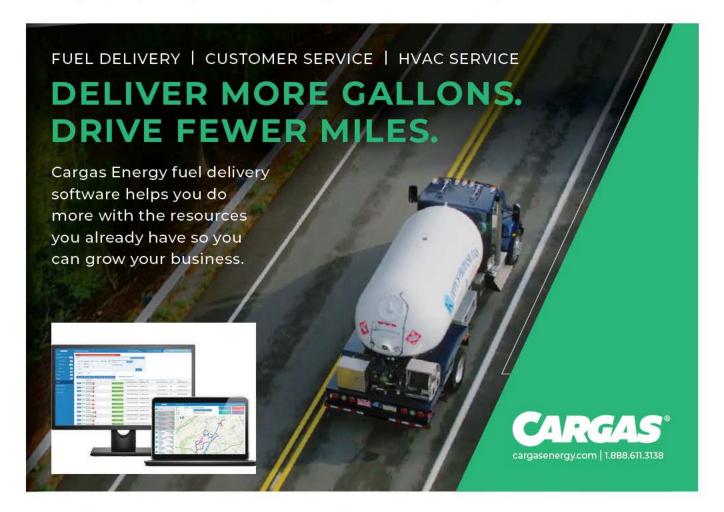
This is how the U.S. economy once again finds itself on the brink of recession. This is how U.S. heating oil retailers find themselves paying wholesale prices on the order of \$5 per gallon. This is how U.S. consumers could find themselves forced to decide between paying for heat and paying for groceries whose prices have also been inflated by wanton "foreign" swap trades of agricultural commodities.

According to Professor Greenberger, President Biden along with his CFTC could close the loophole today via executive action. "The president should enact the Obama-era CFTC's corrective rule on an emergency basis," Greenberger says. "An emergency rule would bypass the usual public comment period for the purpose of perpetuating an immediate change."

Short of that, Biden could help stabilize U.S. commodity prices by just mentioning Footnote 563 — what we're calling "the foreign interference loophole" — in televised remarks. Greenberger says that alone would drive heating oil and gasoline prices down as much as 25% by sending "non-U.S. swap dealers" a signal to stop engaging in system-shocking speculation.

"Even now, as futures prices begin to fall on recession worries, the spot prices we're seeing do not necessarily reflect the reality of the supply and demand picture, and that's primarily the result of excessive speculation in the swaps market," Greenberger says. "That's why we need to get the word out about this."

Until then, U.S. consumers will continue to be vulnerable to artificially inflated commodity prices that drive up the costs of food, energy, and other everyday necessities.



From: Blake-Kennerly, Shena
To: Swanson, Frances

Cc: <u>Bartol, Bridget; Davis, Christopher; Secretary</u>

**Subject:** RE: Letter to Administration regarding Jones Act waivers

**Date:** Wednesday, October 19, 2022 12:48:09 PM

Hey Frances,

Received, thank you!

Shena

From: Swanson, Frances <frances.swanson@hq.doe.gov>

Sent: Wednesday, October 19, 2022 12:43 PM

To: Blake-Kennerly, Shena <shena.kennerly@hq.doe.gov>

**Cc:** Bartol, Bridget <bridget.bartol@hq.doe.gov>; Davis, Christopher

**Subject:** FW: Letter to Administration regarding Jones Act waivers

Hey Shena – Please see attached for incoming correspondence.

Thanks, Frances

From: (b) (4)

Sent: Wednesday, October 19, 2022 12:21 PM

**To:** DOE Equity @dot.gov; laura.schiller@dot.gov; Monje, Carlos (OST)

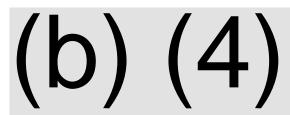
<<u>Carlos.Monje@dot.gov</u>>; <u>kristie.canegallo@hq.dhs.gov</u>; Secretary (b) (6) <u>@hq.doe.gov</u>>;

Davis, Christopher < <a href="mailto:christopher.davis@hq.doe.gov">christopher.davis@hq.doe.gov</a>>

Cc: (b) (4)

**Subject:** [EXTERNAL] Letter to Administration regarding Jones Act waivers

Dear Secretaries Mayorkas, Buittigieg, and Granholm:



Respectfully,

(b) (4)

### (b) (4)

### (b) (4)

This message does not originate from a known Department of Energy email system. Use caution if this message contains attachments, links or requests for information.

From: Frazier, Karen
To: Swanson, Frances

Cc: Williams, Adrianna; Cunningham, Derrick; Davis, Christopher; Tuttle, Robert; Johnsen, Steven (CI)

Subject: Attached Office of Congressional Intergovernmental Affairs (CI) Weekly report dated for October 12– October 19,

2022

**Date:** Tuesday, October 11, 2022 6:46:58 PM

Attachments: ci101122.docx

Hi Frances,

Attached Office of Congressional Intergovernmental Affairs (CI) Weekly report dated for **October 12– October 19, 2022.** It is already uploaded on the front office weekly report sharedrive.

Thanks!

### **WEEKLY REPORT**

October 12- October 19, 2022

### MEMORANDUM FOR THE SECRETARY OF ENERGY

FROM: Karen Frazier, Office of Congressional and Intergovernmental

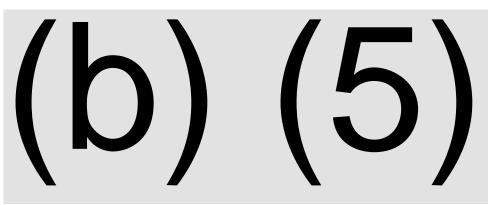
Affairs (CI), karen frazier@hq.doe.gov

SUBJECT: OFFICE OF CONGRESSIONAL AND

INTERGOVERNMENTAL AFFAIRS (CI) WEEKLY REPORT

### **Direct Message to Leadership**

- The Senate is in session. The House is in recess, returning on November 14.
- Jeff Marootian was nominated by POTUS to be the Assistant Secretary for the Office of Energy Efficiency and Renewable Energy (EERE). He is going through courtesy meetings and is awaiting a confirmation hearing.
- Dr. Evelyn Wang, nominee for Director of ARPA-E received a unanimous voice vote in the Senate Environment and Natural Resources (SENR) on June 14. Her confirmation is pending before the full Senate. We are continuing to work through holds on Dr. Wang's nomination.
- David Crane was nominated by POTUS to be the Undersecretary for Infrastructure (S3). He is going through courtesy meetings and is awaiting a confirmation hearing.
- Gene Rodrigues was nominated by POTUS to be the Assistant Secretary of the Office of Electricity.



From: <u>McNicholas, Mailinh</u>

To: <u>Turk, David</u>; <u>Bhattacharyya, Arpita</u>

Subject: RE: ESCC Call

**Date:** Monday, October 10, 2022 9:46:57 PM

Got it, thanks!

From: Turk, David <david.turk@hq.doe.gov> Sent: Monday, October 10, 2022 9:47 PM

To: McNicholas, Mailinh <mailinh.mcnicholas@hq.doe.gov>; Bhattacharyya, Arpita

<arpita.bhattacharyya@hq.doe.gov>

Subject: Fwd: ESCC Call

To print in prep for this call.

From: Fehrman, Bill (Berkshire Hathaway Energy) < Bill.Fehrman@brkenergy.com>

Sent: Monday, October 10, 2022 6:55 PM

To: Turk, David <<u>david.turk@hq.doe.gov</u>>; Kumar, Puesh <<u>puesh.kumar@hq.doe.gov</u>>

**Cc:** Thomas Kuhn < tkuhn@eei.org>; Aaronson, Scott < saaronson@eei.org>

Subject: [EXTERNAL] ESCC Call

Dave/Puesh – in preparation for our call tomorrow related to the upcoming call on Friday, please see the list below for discussion:

We need a Jones Act waiver on LNG deliveries to New England. Are there steps DOE can take to speed refueling infrastructure for oil at the dual fuel tanks (Note – New England can deplete its entire oil inventory in the course of a few days during deep cold spells – almost happened in January 2018)?

DOE support for a transmission line to bring hydro generated electricity from Canada is needed. Also, in general, the Administration should support siting and permitting legislation.

Ensure rail strike is averted and ensure coal deliveries are prioritized.

Prepare to grant environmental waivers to keep older plants operating beyond permit limits (particularly coal and the dual fuel oil plants in New England).

Allow hydro plant operations to be optimized for power generation as opposed to fish management.

Take appropriate steps to prepare for potential rotating outages, particularly in New England (can DOE stock pile generators?)

State and Provincial Regulators and Independent System Operators/Regional Transmission Operators (ISO/RTO) must have mechanisms that they can deploy to prevent or defer the retirement of any generation capacity needed for reliability as determined by the transmission and resource planning organization. The regulatory and policy setting organizations must use their full suite of tools to manage the pace of retirements and ensure replacement infrastructure can be developed and placed in service. DOE should use it 202c authority as

called upon by electric system operators.

Pricing/retention of older capacity until performance equivalent technologies are available at scale (batteries, hydrogen, etc.) – this is also a big issue in market areas

### **Longer term actions:**

Create real Interagency processes/coordination on new regulations that impact electric reliability.

Promote (or at least don't constrict) midstream gas development (in-market storage is going to be increasingly valuable as solar expands). I continue to believe they need to fix midstream gas coordination with electric industry and address midstream cyber security.

Support development of performance standards for all grid connected inverters (not just BES), especially ride through capability.

Fix the interconnection agreements to address inverter performance.

Fix the Generator Interconnection Queue process to exempt load serving entities constructing resources within their general footprint to meet resource/reserve requirements.

Support/expedite electric transmission and natural gas pipeline development.

Relax artificial timelines for electrification/decarbonization until technology and supply chain can support them.

There are other things that need to be done (eg, energy sufficiency planning that we are working on with industry, weather modeling, incorporating more extreme scenarios into routine planning, plant weatherization for more extreme conditions, etc.) but this is my top of mind list for DOE/FERC.

I look forward to discussing tomorrow.

Thanks.
Bill
**************************************
Use caution if this message contains attachments, links or requests for information.
**************************************

From: <u>Turk, David</u>

To: Fehrman, Bill (Berkshire Hathaway Energy); Kumar, Puesh

Cc: Thomas Kuhn; Aaronson, Scott

Subject: Re: ESCC Call

**Date:** Monday, October 10, 2022 9:46:54 PM

Thanks, Bill. Looking forward to our call.

From: Fehrman, Bill (Berkshire Hathaway Energy) <Bill.Fehrman@brkenergy.com>

**Sent:** Monday, October 10, 2022 6:55 PM

**To:** Turk, David <david.turk@hq.doe.gov>; Kumar, Puesh <puesh.kumar@hq.doe.gov>

Cc: Thomas Kuhn <tkuhn@eei.org>; Aaronson, Scott <saaronson@eei.org>

Subject: [EXTERNAL] ESCC Call

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Thanks.
Bill
**********************
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From: Mike Sommers
To: Turk, David

Subject: [EXTERNAL] FW: Letter to Secretary Jennifer Granholm

Date: Tuesday, October 4, 2022 1:17:48 PM

Attachments: <u>image001.png</u>

AFPM Granholm Letter on Refined Product Exports FINAL.pdf

Letter we discussed attached.

From: Mike Sommers <SommersM@api.org> Sent: Tuesday, October 4, 2022 1:07 PM

To: Bartol, Bridget <bridget.bartol@hq.doe.gov>

Cc: Rebbie Riley <RRiley@afpm.org>

Subject: Letter to Secretary Jennifer Granholm

Good Afternoon,

Please find the attached letter on behalf of API and AFPM for the Honorable Secretary Jennifer Granholm.

All the best, Mike Sommers President and CEO

### www.api.org



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October 4, 2022

The Honorable Jennifer M. Granholm Secretary of Energy U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585

### Dear Secretary Granholm:

The U.S. refining industry is committed to working with the Biden administration to ensure Americans have access to affordable and reliable transportation fuels. We are encouraged by your stated intention for a constructive dialogue, appreciate the discussions we have had to date, and look forward to continuing this important work together. However, recent discussions with officials raise significant concerns that the Administration might pursue a ban or limits on refined petroleum products as a means to build domestic inventories of gasoline and diesel, despite your recent comments that, "restrictions are not being considered at this time."

Banning or limiting the export of refined products would likely decrease inventory levels, reduce domestic refining capacity, put upward pressure on consumer fuel prices, and alienate U.S. allies during a time of war. For these reasons, we urge the Biden administration to take this option off the table and focus instead on working with us on policies that will strengthen U.S. energy security and protect consumers.

### A Refined Product Export Ban Will Disrupt Global Markets and Harm U.S. National Security and Geopolitical Standing.

The U.S. refining industry has been working to ensure Americans and our allies have the fuels they need. Indeed, in the wake of an imbalance in supply and demand of liquid fuels due to disruptions by COVID-19 and Russia's unprovoked war in Ukraine, refining utilization rates have averaged well above 90 percent for most of the year. Our world-class refining industry produces more refined products than the U.S. consumes, allowing the U.S. to be a net exporter of fuels to provide stable and affordable energy supplies to our allies. Our ability to supply energy to global markets provides important national security and foreign policy benefits for the U.S., in addition to providing high-quality manufacturing jobs.

<sup>1</sup> Valerie Volcovici and Timothy Gardner, "Biden admin not considering restrictions on oil product exports - Energy Sec.," Reuters, September 23, 2022, <a href="https://www.reuters.com/article/usa-oil-granholm-idAFL1N30U16A">https://www.reuters.com/article/usa-oil-granholm-idAFL1N30U16A</a>.

From the United States' approximately 18 MMBD of refining capacity, about 3.5 MMBD of gasoline, diesel, and other refined products are exported. Restricting these exports would cut off important supply from the international market, putting upward pressure on prices, threatening the global flow of essential energy, undermining U.S. allies and creating negative global economic consequences, including here in the United States.

Banning or otherwise restricting exports of refined petroleum products could have immediate and severe impacts on our industry's ability to reliably supply fuels in the United States, Europe, and especially Latin America. Earlier this year, Biden administration officials called on American refiners to *increase* diesel exports to our allies in Europe. Russia's invasion of Ukraine, on the heels of the pandemic, has led to a historic reshuffling of energy trade flows as countries around the world reconsider and make efforts to reduce their reliance on Russian energy. Refiners, in good faith, are making efforts to supply the European market and yet the Administration appears to criticize this industry on this exact point and potentially abandon your commitment to our allies abroad.

The reordering of global markets has contributed to high crude oil prices and created a global squeeze on refined products, including diesel, gasoline, and jet fuel. Banning exports could discourage energy investments in the U.S., thereby reducing our nation's energy security. The free trade of commodities improves the welfare of global consumers as resources are allocated in the most efficient manner.

In the first half of 2022, U.S. distillate exports to Latin America—our primary export market—returned to pre-pandemic levels, averaging more than 1 million barrels per day (MMBD). If the U.S. were to retreat from our trade relationship and choke off energy supplies, Latin American countries would face a choice between fuel scarcity and destabilization or acquiring product from new sources, namely Russia or China.

We also note that, with our enthusiastic support, the U.S. Trade Representative has requested consultations with Mexico over their treatment of U.S. energy companies. The U.S. should not undermine efforts to facilitate market access for U.S. energy, which is precisely what export restrictions would do.

### A Refined Product Export Ban Will Harm the U.S. Economy.

A July 2022 study from the American Council for Capital Formation (ACCF)<sup>2</sup> assessed the economic impacts of a potential ban on U.S. refined product exports. The study found that:

<sup>&</sup>lt;sup>2</sup> American Council for Capital Formation, "Economic Impacts of a Potential Ban on U.S. Refined Product Exports," July 2022, <a href="https://accf.org/wp-content/uploads/2022/07/ACCF-Product-Export-Study-Final-072122.pdf">https://accf.org/wp-content/uploads/2022/07/ACCF-Product-Export-Study-Final-072122.pdf</a>.

- An export ban could result in the shuttering of an estimated 1.3 million barrels per day
  of U.S. refining capacity (7% of U.S. total) due to trapped refinery production in the Gulf
  Coast. The loss of this capacity would likely strand a surplus of crude oil in the Central
  United States, halting important upstream energy production.
- An export ban could result in higher product prices for U.S. fuel consumers, with more than two-thirds likely to experience price increases of more than 15 cents per gallon for gasoline and 45 cents per gallon for distillates.
- An export ban could cause a net loss to U.S. GDP of more than \$44 billion in 2023.
- An export ban could eliminate 85,000 jobs this year and 35,000 job losses during 2023.

### A Refined Product Export Ban Will Harm Consumers, Particularly on the East Coast.

The U.S. PADD 1 (New England, the Mid-Atlantic and South Atlantic) depended on 1.1 MMBD of petroleum product imports in 2021, including an average of 576,000 barrels per day (b/d) of motor gasoline blending components and 250,000 b/d of distillate. Imports are essential to meet fuel demand in this region in the most cost-efficient manner. The U.S. East Coast does not have enough refining capacity to meet regional demand, so it relies on a combination of fuel from local refineries, other U.S. refining centers—primarily the U.S. Gulf Coast—and fuel imports from the global market. There simply is not sufficient pipeline connectivity or the range of economic shipping alternatives that would be required to transport significantly more fuel to the East Coast from refineries in the Gulf. Banning exports of fuel from the United States will not eliminate this challenge or make it easier and more affordable to supply American-refined fuel to the East Coast. Instead, by cutting into global fuel supplies, it would likely raise the cost of fuel imported into the East Coast from the global market.

Moreover, banning exports of refined petroleum products could lead to unpredictable results and potentially disparate impacts across regions as refineries adjust to the revised trade flows. Because refined products destined for export do not always meet U.S. specifications, banning exports could affect the output of other products that are intended for use in the U.S. as well as reduce global supplies of these products. As a result, eliminating exports may not increase the production of U.S. fuels and could even reduce production.

### **Export Restrictions Will Not Rebuild Regional Fuel Inventories.**

In addition to the clear negative impacts of a refined product export ban, the purported justification does not hold water. For instance, your press release on Friday, September 30, referenced "record gasoline and diesel exports." This is a misrepresentation of U.S. Energy Information Administration (EIA) data, which show that both distillate and gasoline exports have yet to recover to pre-pandemic levels. And while total petroleum product exports have

<sup>&</sup>lt;sup>3</sup> U.S. Department of Energy, "Statement by U.S. Energy Secretary Jennifer M. Granholm," September 30, 2022, <a href="https://www.energy.gov/articles/statement-us-energy-secretary-jennifer-m-granholm/">https://www.energy.gov/articles/statement-us-energy-secretary-jennifer-m-granholm/</a>.

risen thus far in 2022, the total volume increase is within historical norms and should be viewed in the context of significant market disruptions caused by Russia's war in Ukraine.

The implication of your press release is that exports come at the expense of domestic fuel inventories and that U.S. refiners should stop exporting to build inventories in parts of the country where current inventories are below the 5-year average. This suggestion misunderstands the way refined products move and are traded globally. Restricting exports from the U.S. Gulf Coast, for instance, will do little to help build inventories on the West Coast because there is not a readily available or economic way to transport Gulf product to the California coast. Further, exports are not to blame for low West Coast (PADD 5) inventories since the region exports only small volumes of fuel.

### Participation in the Global Market is to the United States' Advantage.

Global commodity prices—including for crude oil, gasoline, and diesel—are set by the global market, not by refiners, in the same way, that farmers do not control the price of corn or wheat. Gasoline and diesel fuel prices are primarily driven by the cost of crude oil, which accounted for much of the changes in gasoline and diesel prices through the first seven months of 2022. Refiners' crude oil acquisition costs represented close to 60 percent of the retail price at the gasoline pump in 2022, according to the EIA.

Our nation benefits from an abundance of oil and natural gas resources. Those combined with American ingenuity and myriad technological advantages position us well to continue to be the world's energy leader in producing, processing, and transporting energy to among the highest environmental standards in the world. The U.S. refining sector, bolstered by our technologically advanced facilities and best-in-class workforce, is the most competitive, efficient, and resilient in the world. Participation in the global market is foundational to our position as the world's refining leader, benefitting American consumers and fuel manufacturers alike.

We urge the Biden administration to speak clearly and with one voice to disavow a refined product export ban or export restrictions, which would only further raise global and U.S. prices, roil energy markets, and deter needed investments across the U.S. energy supply chain. Your understanding and collaboration would be helpful to further a constructive dialogue.

Thank you for your consideration of this matter, and we look forward to our continued work on behalf of the American people.

Sincerely,

Mike Sommers President and CEO American Petroleum Institute 200 Massachusetts Ave, NW Washington, DC 20001 Chet Thompson
President and CEO
American Fuel & Petrochemical Manufacturers
1800 M Street, NW, Suite 900 North
Washington, DC 20036

cc: Brian Deese, Director, National Economic Council
Amos Hochstein, Presidential Coordinator, U.S. State Department

From: Turk, David

To: Bhattacharyya, Arpita
Cc: McNicholas, Mailinh

Subject: Re: Letter to Secretary Jennifer Granholm

Date: Tuesday, October 4, 2022 3:12:39 PM

Attachments: image001.png

### Thx

From: Bhattacharyya, Arpita <arpita.bhattacharyya@hq.doe.gov>

**Sent:** Tuesday, October 4, 2022 **7**:44 PM **To:** Turk, David <david.turk@hq.doe.gov>

Cc: McNicholas, Mailinh <mailinh.mcnicholas@hq.doe.gov>

Subject: FW: Letter to Secretary Jennifer Granholm

FYI Deputy on the letter from API on refined product export ban.

### Thanks!

From: Bartol, Bridget <bri>bridget.bartol@hq.doe.gov>

Sent: Tuesday, October 4, 2022 1:19 PM
To: Secretary (b) (6) @hq.doe.gov>

**Cc:** Davis, Christopher <christopher.davis@hq.doe.gov>; Bhattacharyya, Arpita <arpita.bhattacharyya@hq.doe.gov>; Doran, Emily <emily.doran@hq.doe.gov>

Subject: FW: Letter to Secretary Jennifer Granholm

Hello,

For record keeping and eventually determination if (b) (5)

thanks! Bridget

### **Bridget Bartol**

Deputy Chief of Staff

U.S. Department of Energy

Bridget.Bartol@hq.doe.gov | (b) (6)

Pronouns: She/her/hers

From: Mike Sommers <<u>SommersM@api.org</u>>
Sent: Tuesday, October 4, 2022 1:07 PM

To: Bartol, Bridget < bridget.bartol@hq.doe.gov>

Cc: Rebbie Riley < RRiley@afpm.org>

Subject: [EXTERNAL] Letter to Secretary Jennifer Granholm

Good Afternoon,

Please find the attached letter on behalf of API and AFPM for the Honorable Secretary Jennifer Granholm.

All the best,
Mike Sommers
President and CEO

### www.api.org



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From: <u>Bartol, Bridget</u>
To: <u>Davis, Christopher</u>

Subject: Fwd: Briefing Request - Energy Inventories/Exports [Manchin request]

Date: Tuesday, October 4, 2022 8:12:29 PM

### FYI

From: Bartol, Bridget <bridget.bartol@hq.doe.gov>

Sent: Tuesday, October 4, 2022 8:11 PM

**To:** Nerurkar, Neelesh <neelesh.nerurkar@hq.doe.gov>; Ward, Rebecca <rebecca.ward@hq.doe.gov>; Frisch, Carla <carla.frisch@hq.doe.gov>

Cc: Nouri, Ali <ali.nouri@hq.doe.gov>; Bumgarner, Jennifer

<jennifer.bumgarner@hq.doe.gov>

Subject: Re: Briefing Request - Energy Inventories/Exports [Manchin request]

### I'm not sure (b) (5)

From: Nerurkar, Neelesh < neelesh.nerurkar@hq.doe.gov>

Sent: Tuesday, October 4, 2022 6:55 PM

**To:** Ward, Rebecca <rebecca.ward@hq.doe.gov>; Frisch, Carla <carla.frisch@hq.doe.gov>;

Bartol, Bridget <bridget.bartol@hq.doe.gov>

Cc: Nouri, Ali <ali.nouri@hq.doe.gov>; Bumgarner, Jennifer

<jennifer.bumgarner@hq.doe.gov>

**Subject:** RE: Briefing Request - Energy Inventories/Exports [Manchin request]

+Bridget, with whom OP has been handling this issue.

Thanks, Becca. (b) (5)

### (b)(5)

Analysis on that issue is ongoing and we need until at least mid-next week to complete it and get required sign off.

### (b)(5)

From: Ward, Rebecca <rebecca.ward@hq.doe.gov>

Sent: Tuesday, October 4, 2022 6:04 PM

**To:** Nerurkar, Neelesh <neelesh.nerurkar@hq.doe.gov>; Frisch, Carla <carla.frisch@hq.doe.gov> **Cc:** Nouri, Ali <ali.nouri@hq.doe.gov>; Bumgarner, Jennifer <jennifer.bumgarner@hq.doe.gov>

**Subject:** FW: Briefing Request - Energy Inventories/Exports [Manchin request]

Hi Carla and Neelesh,

I have this incoming request following the Secretary's statement Friday (<a href="https://www.energy.gov/articles/statement-us-energy-secretary-jennifer-m-granholm">https://www.energy.gov/articles/statement-us-energy-secretary-jennifer-m-granholm</a>) and also mentioning the letter to the NE delegation. Basically the Manchin team is getting questions from above about the inventory concerns, what analysis that's based on, are we considering anything (like export bans, etc) (b) (5)

Thanks,
-Becca

**From:** Osman, Christopher (Energy) < <a href="mailto:Christopher Osman@energy.senate.gov">Christopher Osman@energy.senate.gov</a>>

Sent: Tuesday, October 4, 2022 5:30 PM

**To:** Ward, Rebecca < rebecca.ward@hq.doe.gov>

**Cc:** Black, Renae (Energy) < <u>Renae Black@energy.senate.gov</u>>; Van Cleve, Brie (Energy)

<Brie VanCleve@energy.senate.gov>

**Subject:** [EXTERNAL] Briefing Request - Energy Inventories/Exports

Hi Becca!

I wanted to follow-up on our discussion a couple weeks back about scheduling a briefing for our SENR majority team with the DOE folks who are looking at fuel inventory levels, export/import, and pricing issues. We'd like to better understand DOE's analysis of the relationship between current US inventory levels, exports, and prices for petroleum products and natural gas, as well as anything DOE is able to share on additional actions the Department may be considering related to these issues.

We saw the statements Friday from Secretary Granholm and various industry groups on these issues, which reminded me to follow-up on the briefing request. We are also still very interested in the natural gas concerns raised by New England governors in their letter to the Secretary over the Summer.

Feel free to give me a ring if that would help to clarify our goals for this briefing. Thanks again!

### C.J. Osman

Professional Staff Member Chairman Joe Manchin III U.S. Senate Committee on Energy & Natural Resources M: **(b) (6)** 

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From: <u>Tarduogno, Matthew</u>

To: Macintyre, Douglas; Speiser, Tertia; Buell, Kenneth

Cc: Wills, Andrew C; Perry, Robert

Subject: RE: Jones Act

Date: Monday, September 26, 2022 11:30:08 AM

(b) (5). The ship actually arrived yesterday, its just hanging out off the coast. (b) (5)

-Matt

From: Macintyre, Douglas <douglas.macintyre@hq.doe.gov>

Sent: Monday, September 26, 2022 11:29 AM

**To:** Tarduogno, Matthew <matthew.tarduogno@hq.doe.gov>; Speiser, Tertia <tertia.speiser@hq.doe.gov>; Buell, Kenneth <kenneth.buell@hq.doe.gov>

Cc: Wills, Andrew C <andrew.wills@hq.doe.gov>; Perry, Robert <robert.perry2@hq.doe.gov>

Subject: RE: Jones Act

(b)(5)

From: Tarduogno, Matthew < matthew.tarduogno@hq.doe.gov>

Sent: Monday, September 26, 2022 11:25 AM

**To:** Macintyre, Douglas <<u>douglas.macintyre@hq.doe.gov</u>>; Speiser, Tertia <<u>tertia.speiser@hq.doe.gov</u>>; Buell, Kenneth <<u>kenneth.buell@hq.doe.gov</u>>

Cc: Wills, Andrew C <andrew.wills@hq.doe.gov>; Perry, Robert <robert.perry2@hq.doe.gov>

Subject: RE: Jones Act

BP did request a waiver last week, but it has not yet been granted.

-Matt

From: Macintyre, Douglas < douglas.macintyre@hq.doe.gov>

Sent: Monday, September 26, 2022 11:24 AM

To: Speiser, Tertia < tertia.speiser@hq.doe.gov>; Buell, Kenneth < kenneth.buell@hq.doe.gov>;

Tarduogno, Matthew < matthew.tarduogno@hq.doe.gov>

Cc: Wills, Andrew C <andrew.wills@hq.doe.gov>; Perry, Robert <robert.perry2@hq.doe.gov>

Subject: Jones Act

I saw a thread on Twitter that apparently BP loaded a Marshall Islands tanker at Texas City with diesel fuel and is now off the coast of Puerto Rico asking for a Jones Act waiver. Just alerting you to this in case this is true and you were not aware. (b) (5)

Doug

From: McGarry, Thomas on behalf of McGarry, Thomas <thomas.mcqarry@hq.doe.gov>
To: Oosterling, Paul S; Gele, Lionel J; Gele, Kelly M; Roark, Christopher S; Habbaz, Ralph R

Subject: EXEC-2020-004168 - Emergency Response Capability of the US Strategic Petroleum Reserve (CLEAN) 6-17-22 V2

Date: Thursday, October 13, 2022 1:48:39 PM

Attachments: EXEC-2020-004168 - Emergency Response Capability of the US Strategic Petroleum Reserve (CLEAN) 6-17-22

V2.docx

Paul, attached is the study we were talking about during the meeting. Let me know if you have any questions.

Thanks

V/R

tom

From: Swanson, Frances
To: Blake-Kennerly, Shena

Cc: Bartol, Bridget; Davis, Christopher; Secretary

Subject: FW: Letter to Administration regarding Jones Act waivers

Date: Wednesday, October 19, 2022 12:42:54 PM

Attachments: (b) (4)

Hey Shena – Please see attached for incoming correspondence.

Thanks,

Frances

From: (b) (4)

Sent: Wednesday, October 19, 2022 12:21 PM

To: (b) (6) @dot.gov; laura.schiller@dot.gov; Monje, Carlos (OST)

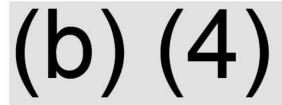
<Carlos.Monje@dot.gov>; kristie.canegallo@hq.dhs.gov; Secretary (b) (6) @hq.doe.gov>;

Davis, Christopher <christopher.davis@hq.doe.gov>

Cc: (b) (4)

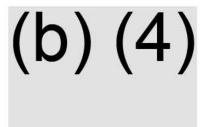
Subject: [EXTERNAL] Letter to Administration regarding Jones Act waivers

Dear Secretaries Mayorkas, Buittigieg, and Granholm:



Respectfully,





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From: Frazier, Karen
To: Swanson, Frances

Cc: Williams, Adrianna; Cunningham, Derrick; Davis, Christopher; Tuttle, Robert; Johnsen, Steven (CI)

Subject: Attached Office of Congressional Intergovernmental Affairs (CI) Weekly report dated for November 2– November

9, 2022. Thanks!

**Date:** Tuesday, November 1, 2022 6:29:45 PM

**Attachments:** ci110122.docx

Hi Frances,

Attached Office of Congressional Intergovernmental Affairs (CI) Weekly report **dated for November 2– November 9, 2022**. It is already uploaded on the front office weekly report sharedrive.

Thanks!

#### **WEEKLY REPORT**

November 2– November 9, 2022

#### MEMORANDUM FOR THE SECRETARY OF ENERGY

FROM: Karen Frazier, Office of Congressional and Intergovernmental

Affairs (CI), karen frazier@hq.doe.gov

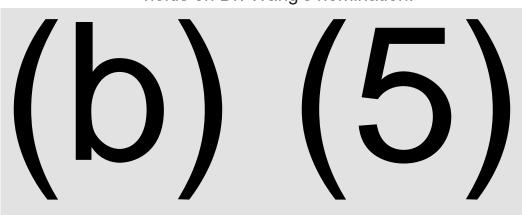
SUBJECT: OFFICE OF CONGRESSIONAL AND

INTERGOVERNMENTAL AFFAIRS (CI) WEEKLY REPORT

#### **Direct Message to Leadership**

• The Senate and House remain in recess, returning on November 14.

- We are tracking a confirmation hearing on November 17<sup>th</sup> for David Crane (S3), Jeff Marootian (EERE), and Gene Rodrigues (OE).
- Dr. Evelyn Wang, nominee for Director of ARPA-E received a unanimous voice vote in the Senate Environment and Natural Resources (SENR) on June 14. We are continuing to work through holds on Dr. Wang's nomination.



From: Winn, Mara E

To: <u>Kumar, Puesh; Wills, Andrew C; Macintyre, Douglas; Neukomm, Monica; Muneer, Fowad</u>

Cc: Buell, Kenneth

**Subject:** FW: National Petroleum Council: Proposed Final Draft of the First Response

Date:Saturday, October 29, 2022 1:07:07 PMAttachments:DWW Letter & Attachments (10-28-2022).pdf

Importance: High

For your awareness, the final draft of the first response of the NPC Study is attached.

Best,

Mara

#### Mara E. B. Winn

**Deputy Director** 

Preparedness, Policy, and Risk Analysis Division

Office of Cybersecurity, Energy Security, and Emergency Response (CESER)

U.S. Department of Energy

Office: 202-586-2934 | Mobile: (b) (6) | Email: mara.winn@hq.doe.gov

Pronouns She/Her

**From:** Pam Dunning <pdunning@npc.org> **Sent:** Friday, October 28, 2022 11:40 PM **To:** Pam Dunning <pdunning@npc.org>

Subject: [EXTERNAL] National Petroleum Council: Proposed Final Draft of the First Response

Importance: High

#### TO ALL MEMBERS OF THE NPC COMMITTEE ON SHORT-TERM ACTIONS AND TRANSITION STRATEGIES

#### Dear Member:

I am pleased to send you Committee Chair Darren Woods' letter of today transmitting the proposed final draft of the first response to Secretary Granholm's July 29, 2022, request to the Council. An attachment to Mr. Woods' letter is a ballot on which to signify your approval or disapproval of the proposed final draft first response to Secretary Granholm. Please note that Mr. Woods' letter asks you to return your completed ballot to me <u>no later than November 3, 2022</u>.

Should you encounter a problem opening the attachments, please do not hesitate to contact me.

Thank you.

Pam Dunning
National Petroleum Council
(b) (6) (cell)

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#### NATIONAL PETROLEUM COUNCIL

An Oil and Natural Gas Advisory Committee to the Secretary of Energy

1625 K Street, N.W. Washington, D.C. 20006-1656

#### VIA E-MAIL

Phone: (202) 393-6100

Fax: (202) 331-8539

October 28, 2022

TO ALL MEMBERS OF THE NPC COMMITTEE ON SHORT-TERM ACTIONS AND TRANSITION STRATEGIES

#### Dear Member:

I am pleased to report that with the advice of the NPC Appointment Committee and the approval of the Secretary of Energy, I have officially established the NPC Committee on Short-Term Actions and Transition Strategies and appointed its membership. As was our agreed upon plan, the core of the Committee membership is those of you serving on the Cochairs' Coordinating Committee. To this core we have added several additional Council members who have stepped up to provide their unique perspectives to the Committee's work.

Attached please find the proposed final draft of the Committee's work plan, which will also serve as the first response to Secretary Granholm's July 29, 2022, request. The document describes the efforts that the Committee has underway to provide the requested advice on emergency preparedness planning, evolving global markets, and industry actions, both underway and planned, in support of the goal of a net-zero economy by 2050. To put these efforts into perspective, the draft provides an informative narrative of historical oil and natural gas supply and demand, and potential actions to increase near-term supply. This narrative is responsive to the Secretary's request for specific information. As described in my September 30, 2022, letter, this draft was assembled by our Report Drafting Subcommittee, based on the work of the three work stream subgroups. The attached document has also been reviewed and approved by the Steering Committee and incorporates their comments.

I do not believe we need to have a meeting to discuss and approve this proposed final work plan. Accordingly, I request that you utilize the attached ballot to record both acceptance of your appointment to the Committee and your approval or disapproval of the work plan. Space is also provided on the ballot for any comments you may wish considered for coverage in the final report. Please send your completed ballot to Pam Dunning pdunning@npc.org no later than next Thursday, November 3, 2022.

Assuming Committee approval, the document will be sent to Secretary Granholm. As this is a work plan/progress report, Council's approval will not be sought, however we will send a copy to all members at the same time as it is sent to the Secretary.

Sincerely yours

Darren W. Woods

Chair, NPC Committee on

Short-Term Actions and Transition Strategies

Attachments

CC:

# NPC COMMITTEE ON SHORT-TERM ACTIONS AND TRANSITION STRATEGIES

# **BALLOT**

I accept my appointment to the NPC Committee on Short-Term Actions and Transition Strategies.  I have reviewed the proposed study work plan for the Committee's preparation of a final response to Secretary Granholm's request of July 29, 2022.  I am in favor of the work plan's adoption by the Committee, and transmittal to Secretary Granholm.  I am not in favor of the work plan's adoption by the Committee, and transmittal to Secretary Granholm.  COMMENTS AND/OR SUGGESTIONS:
response to Secretary Granholm's request of July 29, 2022.  I am in favor of the work plan's adoption by the Committee, and transmittal to Secretary Granholm.  I am not in favor of the work plan's adoption by the Committee, and transmittal to Secretary Granholm.
transmittal to Secretary Granholm.  I am not in favor of the work plan's adoption by the Committee, and transmittal to Secretary Granholm.
COMMENTS AND/OR SUGGESTIONS:

PLEASE E-MAIL YOUR COMPLETED BALLOT ON OR BEFORE NOVEMBER 3, 2022, TO:

<pdunning@npc.org>

# **National Petroleum Council**

### Work Plan for Response to Secretary Granholm Letter of July 29, 2022

### INTRODUCTION

In mid-June 2022, President Biden wrote to seven major refiners in the United States concerning his views on the energy situation and its impacts. In those letters, he stated that he was directing the Secretary of Energy to convene an emergency meeting and engage the National Petroleum Council (NPC). As a result, Secretary Granholm requested a meeting with the NPC's Cochairs' Coordinating Committee (CCC), given that a purpose of the CCC is to discuss emerging issues with the Secretary and to discuss whether an NPC study would be useful. The CCC had a productive meeting with the Secretary on July 1st and provided the Committee members' individual views on the then-current situation and potential actions that could be taken in response. Subsequently, by letter dated July 29, 2022, the Secretary requested the Council to provide certain information and formal advice on these topics. The Secretary's letter, in part, requested:

- 1. Details, within 30 days, of (a) how industry is working to supply oil and refined products to meet U.S. demand; and (b) near-term steps the Administration can consider to increase U.S. supply.
- An analysis, within 120 days, of (a) the evolving global oil market and its implications on U.S. supply; and (b) industry efforts to support a net-zero economy by 2050.

As required by the Council's Articles of Organization, the NPC Agenda Committee reviewed the Secretary's request, and recommended that the request be accepted. In a follow-up discussion, Deputy Secretary of Energy David Turk explained that implicit in both the 30-day and 120-day requests is the desire to have the NPC's views on ways to improve government and industry coordination in responding to incidents of significant supply disruptions.

Consistent with the Agenda Committee's favorable recommendation, Deputy Secretary Turk's clarification, and in accordance with the Council's Articles of Organization's provision for addressing urgent requests from the Secretary, the Council:

- Utilized the membership of the Cochairs' Coordinating Committee, expanded as necessary, to respond, and constitute an NPC Committee on Short-Term Actions and Transition Strategies.
- Appointed Vice Chairs to lead three work streams:
  - Short-term industry and government actions
  - Emergency preparedness planning
  - Evolving global markets and the transition to net zero.

Attachment 1 provides a copy of the Secretary's July 29, 2022, letter, and Attachment 2 provides rosters of the Committee on Short-Term Actions and Transition Strategies and its subgroups.

# **Report Objectives**

Secretary Granholm requested the NPC to provide a list of (1) the ways industry is preparing to secure consistent, physical supply for the American people, and (2) near-term actionable steps the Administration can consider to help increase physical supply of oil and refined products while continuing safe, efficient operations and maintenance of production facilities. "Supply" was clarified to refer to crude oil, refined petroleum products, natural gas, and natural gas liquids.

Other questions were raised in the Secretary's letter:

- How can we increase supply? Where is there efficiency and/or opportunity to increase current supplies of crude oil and refined products?
- What are current constraints and market hurdles to getting affordable products to U.S. consumers?
- How are companies reevaluating traditional emergency preparedness? Given the current tight market, how is industry making sure inventories are well supplied should there be a critical disruption from major and/or multiple storms, a cyber-attack, or other unforeseen events that would cause refineries or pipelines to shut down? What additional actions can the government be taking in coordination with industry to help enhance preparedness?

Finally, the Secretary requested that the final report provide an analysis of the changing global crude oil supply and the impacts on U.S.-based producers, suppliers, and refiners, as well as steps being taken by the industry to be an active player in a net-zero economy by 2050.

# Approach Taken

The NPC Committee on Short-Term Actions and Transition Strategies organized three work groups to help develop this work plan and the final report. Importantly, the final report will include more detail on the matters discussed in this document. The three groups were organized to pull together expertise to address the questions as follows:

- 1. Short-Term Industry and Government Actions Compile a list of actions being taken and suggested government actions that may assist in increasing supply of crude oil, refined products, natural gas, and natural gas liquids.
- Emergency Preparedness Planning Review the NPC study from 2014 and the supplement from 2016 to assess whether the findings are still relevant and the status of implementation as well as incorporating learning from more recent supply disruptions.
- 3. Evolving global markets and transition to a net-zero economy by 2050 Outline the principles to be adhered to and the steps being taken by industry to help ensure a manageable transition to a net-zero economy.

Unless otherwise noted, the sources of the data in this document are the EIA annual and monthly production data, inputs, and utilization data, as well as import/export data and weekly product supplied data.

### PETROLEUM MARKET OVERVIEW AND RECENT DEVELOPMENTS

### Overview of U.S. Petroleum Markets

The United States is the world's largest energy-producing country, providing crude oil and energy products across the globe.<sup>1</sup>

Crude oil, products, natural gas liquids, and natural gas transactions are negotiated by buyers and sellers using references from various domestic and global market hubs such as NYMEX, Brent, Dubai, etc., with thousands of participants every day. Prices can vary based on location, quality, grade, availability, and a number of other factors.

Primary drivers for commodity prices are supply, demand, and inventories. For example, when demand increases and local inventories are low, prices will typically increase. The available industry refining capacity is fixed in the short term as new refining capacity developments typically take multiple years to plan, permit, and build. As such, supply cannot typically quickly adjust and fix any short-term deficits versus demand. Prices in this case, therefore, move higher to incentivize imports from other parts of the world and reduce demand until supply and demand are near equilibrium. Conversely, in times of reduced demand and oversupply, prices will fall to drive lower production.

In 2022, according to Department of Energy, Energy Information Administration (EIA), U.S. volumetric inventories of crude oil, gasoline, and diesel have all trended below the 5-year average. These low inventories, along with limited domestic supply and the supply disruption from the Russian-Ukrainian conflict, drove prices to near record levels as demand recovered in 2022.

### **Crude Oil**

U.S. crude oil production has increased significantly from an average annual 5.0 million barrels per day in 2008 to 12.9 million barrels per day in December 2019, according to the EIA. This time period is often referred to as the "Shale Revolution." In 2020, COVID-19 had a significant impact on refined products demand, which resulted in low prices for products and crude as the market responded to the oversupply. As a result, U.S. crude production fell to a low of 9.7 million barrels per day in May of 2020, partially recovered through 2021 and 2022, and as of June 2022 was back up to near pre-COVID highs at 11.8 million barrels per day.

Despite being the world's largest crude producer, the United States remains a net importer of crude. According to the EIA, the United States imported 2.9 million barrels per day on a net basis in the first half of 2022 (over 6.2 million barrels per day of typically medium and heavy sour crude imports partially offset by 3.3 million barrels per day of generally lighter, sweeter crude exports). Canada is the largest exporter of crude to the United States, supplying a net average of 3.5 million barrels per day during the January-June 2022 time period.

Crude oil prices globally have been very volatile over the last two years, driven by changing supply and demand – first with the drop in demand caused by COVID-19 leading to high inventories and low prices, followed by an increase in demand and tighter supply/demand leading to higher prices. The

<sup>&</sup>lt;sup>1</sup> BP, Statistical Review of World Energy – 2022, <a href="https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-us-insights.pdf">https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-us-insights.pdf</a> (accessed September 20, 2022).

global petroleum markets are linked to the United States and are a key part of global market dynamics and price fluctuations.

### **Refined Products**

The U.S. refined product transportation system relies heavily on product supplies from both U.S. refiners and foreign imports. An extensive logistics and infrastructure system moves products primarily from industry refining centers in the U.S. Gulf Coast and the Midwest to demand centers across the country. As necessary, marine movements of crude, products, and natural gas liquids supplement the onshore pipeline system. Marine movements between U.S. ports require Jones Act vessels that use U.S. built and owned ships with U.S. crews. Meeting shipping requirements of the Jones Act is generally more expensive than international alternatives.

The U.S. refining industry has made significant investments over many years in the capability to cost-effectively process hard-to-refine heavy and sour crudes. That said, many U.S. refineries are not a good match for the growing production of U.S. light sweet crude from unconventional shale. The most cost-effective production of U.S. products requires the import of heavy, hard to refine crudes and export of some of the lighter, sweeter domestic crudes.

As the United States is in the midst of the 2022 hurricane season, ending November 30, with gasoline and diesel inventories below their 5-year volumetric averages, policy makers have voiced concern that adequate supply may not exist to meet demand requirements across the entire United States and particularly in the Northeast, where supply is dependent on movements from the U.S. Gulf Coast and foreign imports.

### Natural Gas Liquids (NGLs)

Supply of NGL products, specifically including propane, have increased over the last five years due to the Shale Revolution. According to the EIA, propane production from gas processing increased from about 1.5 million barrels per day in the first half of 2019, to approximately 1.8 million barrels per day during the same time period in 2022. This 18% increase (almost 280 thousand barrels per day) makes propane one of the few commodities surpassing 2019 (pre-COVID) production.

According to the EIA's September 2022 Short-Term Energy Outlook (STEO), Q3 propane inventories are over 5 million barrels above 2021. Further, the EIA STEO domestic demand outlook for Q4 2021 and Q4 2022 is essentially flat at approximately 960 thousand barrels per day. As U.S. production has increased, the United States has exported the excess supply to Europe and Asia.

# **Natural Gas**

The United States is the world's largest producer of natural gas and has been a net exporter of natural gas since 2017, primarily due to the Shale Revolution and associated boom in horizontal drilling and hydraulic fracturing. A meaningful amount of the U.S. natural gas production is directly related to crude oil production (associated natural gas). When crude oil production increases, associated natural gas production also increases.

Within the United States, natural gas is generally moved from production regions to domestic demand centers by pipeline. Additional quantities are exported by pipeline to Mexico and Canada. The United States also exports natural gas in the form of liquefied natural gas (LNG) that is cooled to –260° F,

via large liquefaction facilities primarily located on the Gulf Coast. The EIA highlighted in a recent report<sup>2</sup> that as of July 2022, the United States now has more LNG export capacity than any other country and currently exports more LNG than any other country. U.S. LNG exports averaged 11.1 billion cubic feet per day during the first half of 2022.

Increasingly fragile European natural gas supply security amid the Russian invasion of Ukraine has led to a heightened focus on completing enhancements to the United States' ability to move domestic production to coastal export areas to supply Europe and the rest of the world with additional LNG.

# Petroleum Markets – Development Over the Last 3 Years

The elevated crude oil and transport fuel volumetric inventories of 2020 and 2021 had by early September 2022 moved below the 5-year averages. Generally, in periods of low inventories and increasing demand, prices tend to be higher than historical averages and this is true today.

A number of factors over the last few years have set the stage for the supply, demand, and inventory fundamentals seen today. These include COVID-19, the response from the Organization of Petroleum Exporting Countries (OPEC) and additional partner countries collectively known as OPEC+, and more recently, the Russian invasion of Ukraine.

### **Product Demand**

On January 20, 2020, the CDC reported the first laboratory-confirmed case of the 2019 Novel Coronavirus (COVID-19) in the United States.<sup>3</sup>

By late February/early March 2020, U.S. energy markets were being impacted. Various states began implementing shutdowns of schools, businesses, public facilities, restaurants, and travel in order to prevent the spread of COVID-19, significantly reducing product demand. Gasoline was particularly impacted, falling almost 45% according to the EIA.

The EIA Weekly U.S. Product Supplied of Finished Motor Gasoline, which reflects demand, week ending February 28, 2020, was 9.19 million barrels per day. Only a month later, week ending April 3, 2020, demand had fallen to 5.1 million barrels per day, a drop of over 4 million barrels per day.

Demand for jet fuel also dropped as airlines began shutting down domestic and international flights. Diesel demand also fell, although not as drastically as gasoline motor fuel and jet fuel.

Although product demand has recovered since the lows of 2020, global and U.S. demand remains below pre-COVID-19 levels. EIA U.S. gasoline monthly product supplied (demand), June 2022, is approximately 6% below June 2019.

<sup>&</sup>lt;sup>2</sup> EIA, U.S. LNG export capacity to grow as three additional projects begin construction, September 6, 2022, <a href="https://www.eia.gov/todayinenergy/detail.php?id=53719#">https://www.eia.gov/todayinenergy/detail.php?id=53719#</a> (accessed September 27, 2022).

<sup>&</sup>lt;sup>3</sup> Centers for Disease Control and Prevention, Early 2020, <a href="https://www.cdc.gov/museum/timeline/covid19 html">https://www.cdc.gov/museum/timeline/covid19 html</a>, (accessed September 20, 2022).

# Refinery Runs (Crude Oil Demand/Product Supply)

As demand for transportation fuels fell during the COVID-19 lockdowns, refinery margins dropped to the lowest sustained level in history as the available refining capacity far exceeded demand.

U.S. refiners lowered production in response. The EIA's Weekly Inputs & Utilization report, week ending December 27, 2019, reported refinery crude oil runs of 17.28 million barrels per day. However, by week ending May 8, 2020, U.S. refinery runs fell to 12.4 million barrels per day, a drop of 4.9 million barrels per day (25%). The lowest level of crude oil runs, since August 20, 1982, was reported week ending February 26, 2021, when U.S. refinery runs hit a low of approximately 9.9 million barrels per day, a drop of over 7 million barrels per day (40%), with Winter Storm Uri contributing to the reduction. Similar lower production actions were also taken by refiners outside the United States.

In this low-margin environment, several refineries permanently shut down, globally and in the United States. According to a report prepared by ESAI Energy (July 2022), between 2019 and early 2022 the U.S. and Eastern Canada refinery system shut down approximately 1.5 million barrels a day of refinery capacity, over 8% of the December 2019 run levels mentioned above. Further, Facts Global Energy Group's (FGE) Annual World Refining Outlook (June 2022), showed global refinery rationalization near 5 million barrels per day for the same time frame.

As demand recovered through 2021 and 2022, the remaining U.S. refineries, and similarly those in most of the rest of the world, quickly increased the utilization of available refining capacity to meet the transportation fuels demand recovery. A notable exception is China, where substantial refining capacity has been added but is not being utilized due to the imposition of export quotas.

Global demand for crude has slowly recovered from May of 2020 to today as the world has largely learned how to live with COVID-19. According to EIA, U.S. refining crude demand has increased from the monthly lows in April 2020 by approximately 3.7 million barrels per day as of June 2022.

# **Crude Oil Production (Supply)**

Globally, according to the International Energy Agency (IEA), demand for oil liquids declined by 25 million barrels per day or 25% in the 2nd quarter of 2020. However, crude oil supply was slower to respond. OPEC produced at a near record rate in April of 2020 at 30.7 million barrels per day, termed "Black April" by the IEA's May 2020 Oil Market Report. After Russia and Saudi Arabia were unable to agree on actions to address the emerging global pandemic, Saudi Arabia produced almost 12 million barrels per day in April, an increase of more than 2 million barrels per day above the prior month.

With supplies exceeding demand, inventories built at an unprecedented rate and prices plummeted, with WTI crude in Cushing posting a record low price of -\$37.63 per barrel on April 21, 2020.

In the face of significant financial distress associated with the lower crude prices, exploration and production companies cut back their activity levels and associated production fell significantly. According to the Weekly U.S. Field Production of Crude Oil reported by the Department of Energy, Energy Information Administration (EIA), crude production was 13.1 million barrels per day during the

Page 6

<sup>&</sup>lt;sup>4</sup> International Energy Agency, Oil Market Report, May 14, 2020, p. 3.

week ending February 28, 2020. By the week ending August 28, 2020, production was 9.7 million barrels per day, a drop of 3.4 million barrels per day (25%).

As a result of the low demand, and falling prices, drilling activity slowed significantly in all U.S. basins. At the end of 2019, Baker Hughes total rig count was over 800 rigs; however, by early May 2020, that count was cut in half. Rig counts continued to drop in subsequent months, going below 300 rigs at the lowest points.

OPEC+ also took steps to reduce crude oil production. On April 12, 2020, OPEC+ announced a plan to restore stability to crude markets by reducing their aggregate crude production by 9.7 million barrels per day or approximately 10% of global oil liquids supply, and then slowly increased their crude supply back to more normal levels from May 2020 through September of 2022.

For most of 2020 and 2021, Organization for Economic Co-operation and Development (OECD) commercial inventories remained elevated and crude prices remained low. In response, exploration and production companies maintained low levels of investment and production maintenance. These lower investment levels, coupled with ongoing natural field decline, left most of the world's crude producers poorly positioned to quickly increase supplies to meet recovering demand. IEA data show that global crude supply is down approximately 6% when comparing 2019 to 2021 annual averages.

Through this period, U.S. monthly crude production initially fell from a high of nearly 13 million barrels per day in 2019 to 9.7 million barrels in 2021, and subsequently increased to 11.8 million barrels per day in July 2022, an increase of 2.1 million barrels per day.

Despite the increase in U.S. production and the slow but steady production increases by OPEC+, OECD crude commercial inventories remain below 5-year averages. IEA OECD crude oil inventories, July 2022, are about 14% below the 2019 highs and approximately 15% below the 5-year average.

### **Natural Gas**

As energy demand increased with the global economic recovery from the pandemic, the immediate increase in natural gas demand was largely met via supplies from the completion of DUCs (drilled but uncompleted wells). A combination of supply chain and labor challenges, as well as infrastructure constraints has limited the increase in production growth despite high prices. Although production has increased modestly, demand growth has outpaced production growth as consumption in the electric sector remains high. According to the EIA, "We expect U.S. production of dry natural gas to increase in 2022, but not as much as demand." They go on to say expectations are natural gas demand will remain above 2021 levels.

Global natural gas demand has further been supported by new LNG liquefaction facilities coming online on the U.S. Gulf Coast.

<sup>&</sup>lt;sup>5</sup> EIA, EIA expects U.S. natural gas prices to remain high through 2022, June 9, 2022, <a href="https://www.eia.gov/todayinenergy/detail.php?id=52698">https://www.eia.gov/todayinenergy/detail.php?id=52698</a>. (accessed September 27, 2022)

### **Russian Invasion of Ukraine**

In late February 2022, Russia invaded Ukraine. In response to the invasion, several countries, including the United States, implemented various forms of sanctions. Many corporations also announced efforts to reduce or eliminate their operations in Russia.

U.S. sanctions prohibiting the import of any Russian energy commodities were issued in March 2022. Although the United States was not a large importer of Russian crude oil or finished gasoline, it was an importer of Russian diesel, residual fuel oil, and vacuum gasoil used as feedstock for gasoline producing refinery units. The loss of these feedstocks further reduced the ability of U.S. refiners to produce gasoline motor fuel.

Although actual volumes vary month-to-month, Europe has historically been a large importer of Russian crude, diesel, and natural gas to supply their domestic demand. European sanctions, including voluntary action to not buy Russian crude and products by companies, are impacting the global markets. Russian barrels are travelling further to reach alternative customers, and Europe and the United States are sourcing replacements that are also further away. These changes have created a less efficient global shipping market leading to higher freight rates. Recent product tanker rates are at the highest level for over two decades according to Clarksons Shipping Co.<sup>7</sup> Russian oil tanker exports are changing from regional ports in Europe to long-haul destinations such as China and India, pushing rates to higher levels according to shipping company Evercore.

With various restrictions on Russian crude oil and products, they have become significantly discounted versus non-Russian crude and products. Despite the restrictions, reports indicate Russian crude and refined products production is relatively unchanged, pre and post invasion, as some countries continue to import. As an example,<sup>8</sup> India has increased their purchase of Russian crude due to lower crude costs. However, Russian crude production could drop by 800 thousand barrels per day to 10.2 million barrels per day by December 2022 as the EU embargo comes into full effect, according to the IEA.<sup>9</sup>

Europe has long been a large importer of Russian natural gas to meet its domestic demand. In particular, Germany imports natural gas from Russia via the Nord Stream 1 pipeline. Russia has curtailed flows on Nord Stream 1 throughout the year, and in late August 2022, gas flows fell to zero. As a result of Russian pipeline curtailments, Europe has been forced to meet much of its natural gas demand by buying LNG from the global market. This increased demand is supporting global LNG prices. European policy makers are concerned there may be insufficient natural gas to meet European demand this winter, when supply is needed most. While European gas storage is currently at a relatively healthy level, these stocks can be quickly depleted in the event of sustained cold weather.

<sup>&</sup>lt;sup>6</sup> EIA, The United States imports more petroleum products than crude oil from Russia, March 22, 2022, https://www.eia.gov/todayinenergy/detail.php?id=51738# (accessed September 27, 2022)

<sup>&</sup>lt;sup>7</sup> Irina Slav, The Energy Market's Next Crisis: Oil Tanker Shortages, September 14, 2022 <a href="https://oilprice.com/Energy/Energy-General/The-Energy-Markets-Next-Crisis-Oil-Tanker-Shortages html">https://oilprice.com/Energy/Energy-General/The-Energy-Markets-Next-Crisis-Oil-Tanker-Shortages html</a>. (accessed September 27, 2022)

<sup>&</sup>lt;sup>8</sup> Shruti Menon, BBC News, Ukraine crisis: Russian oil turns to Asia, September 16, 2022, <a href="https://www.bbc.com/news/world-asia-india-60783874">https://www.bbc.com/news/world-asia-india-60783874</a> (accessed September 27, 2022)

<sup>&</sup>lt;sup>9</sup> International Energy Agency, Oil Market Report, September 14, 2022, p. 14.

### **China Position**

Although data from China are not widely reported, various IEA Oil Market Reports show demand was, and continues to be, impacted by China's zero-COVID policy. September's 2022 IEA Oil Market Report has Chinese refinery throughput for July 2022 at 12.8 million barrels per day versus a maximum demonstrated rate of over 15 million barrels per day.

Also, the EIA reports that China will add an additional 1.1 million barrels a day of refining capacity in 2022, bringing total nameplate capacity to 19.2 million barrels per day, in anticipation of future domestic demand.

According to FACTS Global Energy Group (FGE),<sup>10</sup> mid-2021, China strengthened State control of oil liquids imports and exports and concurrently reduced the export quotas for gasoline, diesel, and jet fuel. As a result of this China policy, fuel exports were cut in half between the first half of 2021 and the first half of 2022 according to FGE.

Chinese refinery utilization declined with lower domestic demand due to COVID-19 lockdowns, lower exports, and the growth in its refining capacity. According to IEA and FGE reports, China currently has the largest concentration of spare global refining capacity, assessed at more than 6 million barrels per day. While China has recently slightly increased export quotas, a recent report from FGE states that China could increase fuel exports up to 1.2 million barrels per day if they removed quota restrictions completely.

### **Current Market Conditions**

Due to the factors described earlier, as of early September 2022 volumetric inventories are at or below the historical 5-year averages for almost all oil and gas commodities. According to the IEA and EIA, crude oil inventories in the United States, Europe, and OECD all remain below the 5-year averages. Motor fuel gasoline and diesel volumetric inventories are also below the 5-year average in the United States, Europe, and OECD. Although there are variances within the various regions, volumetric inventories have not recovered to their pre-COVID levels.

As of early September 2022, PADD I industry gasoline inventory is consistent with historical levels. EIA data show that PADD I inventories of total gasoline and ethanol averaged 60 million barrels during the summer and are entering September at 59.3 million barrels. While this is on the low end of the typical volumetric range, it is important to note that PADD I gasoline demand through June was 9% below the 2017 to 2019 average of 3.3 million barrels per day. On a Days of Supply basis, industry gasoline inventories are at near normal levels. Adding surplus inventory above what is needed to efficiently manage the supply chain increases costs to consumers due to increased carrying costs. A further consideration when evaluating gasoline stock levels is the seasonal change of gasoline specifications, especially from winter to summer when inventories must be carefully managed as winter spec gasoline cannot be sold in summer without an EPA waiver.

Historically, PADD I secures incremental supply by importing foreign barrels; approximately 0.5 million barrels per day of imports are required to meet typical PADD I motor gasoline demand.

<sup>&</sup>lt;sup>10</sup> Facts Global Energy Group, Annual World Refining Outlook 2022, June 2022, used by permission.

Since mid-2021, PADD I diesel inventories have been at or below the pre-pandemic 5-year range as global diesel supplies are tight and market signals have not encouraged growth of commercial inventories to meet normal demand. While the inventories of diesel are currently low, EIA data show that in prior major storms impacting U.S. Gulf Coast refining capacity, unlike gasoline stocks, diesel inventories do not experience significant draws.

Global diesel prices may remain high as Europe implements sanctions on Russian diesel imports. These sanctions may cause temporary disruptions as global trade flows adjust, including redirecting current exports to Latin America to Europe as Russian barrels try to find homes in Latin America, Africa, and the Middle East as European sanctions take hold. With diesel supplies likely to remain tight, in the event of a disruption, enabling efficient resupply through steps like a waiver of the Jones Act requirements while allowing the market signals to drive industry response will be the most effective response. This will be addressed in more detail in the final report.

Further, high natural gas prices and carbon taxes in Europe have increased European refiners' cost to produce refined products, reducing utilization. The world needs European refineries to run to meet global demand. Refined product prices have currently adjusted globally to cover the higher cost of European refining.

As discussed earlier, global natural gas prices are also supported with anticipated extreme shortages in Europe as Russia ceases gas pipeline flows. Europe's continued reliance on other countries for LNG supply can be expected.

# Summary

Global petroleum markets and the U.S. market have gone through very extreme fluctuations in the last 3 years driven by the unprecedented demand destruction caused by COVID-19 and the subsequent recovery, as well as the invasion of Ukraine. Despite the extreme nature of the demand fluctuations, the global market has facilitated industry adjusting to rebalance. The low prices during the demand destruction resulted in production decreases and the higher prices have stimulated the response across the industry to rebuild supply. Throughout this period, the markets have remained supplied through the actions taken by all in the industry. U.S. crude production is back to near record levels and refinery utilization is at all-time highs to meet the current demand.

While global and U.S. inventories are at the lower end of historical levels, they are at a sufficient level to meet ongoing supply. Allowing the global market to function effectively has been the single most important factor in keeping the markets balanced and supplied.

# PRELIMINARY RECOMMENDATIONS FOR CONSIDERATION

As the United States faces lower crude oil and product inventories, and hurricane potential remains, the administration has requested short-term recommendations from industry to mitigate potential supply shortages and higher prices. The government will need to weigh the benefits of some of these proposals versus potentially higher emissions that may accompany them. The following list is potential steps that have been discussed with the Administration to be taken. The final report will include a more definitive set of recommendations.

# **Support Continued Crude Oil and Products Exports**

Petroleum liquids markets are global. Free, unrestricted trade is key for the efficient operation of markets and enabling lowest cost supply. Export bans would interfere with the efficient flow of crude oil, products, and natural gas, exacerbate the tight supply/demand balance, and increase prices to consumers. For these reasons, U.S. exports should not be restricted.

#### **Crude Oil**

The United States is a net importer of crude oil, dependent on other countries for approximately 2.9 million barrels per day of crude supply.

Initially, a crude oil export ban would likely drive global crude prices higher. The United States exports crude — primarily light, sweet crude — to global markets as these crudes are generally more suitable for use in less complex overseas refineries. If these exports are halted, global prices would likely escalate due to limited re-supply options for those refiners to meet their overseas demand.

Conversely, the U.S. system has limited ability to economically process incremental volumes of light, sweet crudes. If exports are not permitted, U.S. sweet crude inventories could build, and U.S. crude production would likely be reduced.

Additionally, many trade partners could place retaliatory bans on the United States, limiting imports of the heavier sour crudes into the United States needed to maximize yields of gasoline, diesel, and other products, potentially driving further price escalation.

### **Refined Products**

An export ban on U.S. refined products would likely lead to higher prices for consumers and lower supply. Currently, prices and margins are incentivizing refiners to produce at maximum rates. A ban of exports would likely reduce domestic refinery utilization and hence production of products, reducing global supply and likely causing world prices to rise.

The United States currently exports approximately 1.5 – 2.1 million barrels per day of gasoline and diesel, with the majority going to Latin America. The United States supplied 12.1 percent of refined oil exports globally, making it the top refined product exporter in 2021. There are several countries (e.g., Mexico, Canada, Brazil, and Chile) that rely on U.S. product exports. Initially, a product export ban may push domestic prices down in exporting regions like the U.S. Gulf Coast as refiners would not be able to run full with no outlet for the product. There is insufficient infrastructure to move the excess product that would be trapped in PADD III (the U.S. Gulf Coast) to PADD I (the U.S. Northeast) where it would be needed, absent prompt waiver of the Jones Act. Regions dependent upon imports, like the U.S. East Coast, would need a substantial price increase to attract imports. The overall loss of production of products would result in higher prices globally and hence in most parts of the United States.

A product export ban would result in the lower utilization, or potentially closure of those U.S. refineries with significant export demand, reducing overall product supply and pushing global product

Page 11

<sup>&</sup>lt;sup>11</sup> American Council for Capital Formation, "Economic Impacts of a Potential Ban on U.S. Refined Product Exports," July 2022, page 37.

<sup>&</sup>lt;sup>12</sup> Ibid, p. 36.

prices up; leading to higher product prices for most U.S. fuel consumers, a net loss of U.S. GDP, and U.S. iobs.<sup>13</sup>

Once European Union sanctions on Russian oil product imports are fully in place in February 2023, U.S. exports to Europe will likely be needed to meet European Union demand. Rather than creating additional barriers to trade, working with global trade partners to break down existing barriers will result in more resilient energy markets and the lowest cost to consumers.

# Certification and Permitting of Oil and Gas Infrastructure including LNG Export Facilities

Over the longer term, investment in oil and natural gas production and logistics facilities will help increase supply and therefore reduce prices. Certification and permitting of these facilities throughout the value chain is frequently the rate-determining step in constructing these facilities. Ensuring that permitting and regulatory processes have clarity and certainty and are effective and efficient will be a key factor in ensuring adequate, cost-effective supply of crude oil, natural gas, and refined products. A constraint in any part of the value chain has the potential to inhibit those investments that would increase supply.

The shortage of natural gas in Europe due to the disruption of Russian supply is impacting European energy costs and is increasing global petroleum product prices as natural gas is required to run refineries. Increasing U.S. LNG exports would have the potential to improve European gas supply, which would reduce prices and improve European refinery operating costs.

Global LNG demand exceeds supply, and a key question is to what extent and how fast could U.S. natural gas production, transportation, and LNG export capacity increase to help the European and global LNG market. Currently, there are approved construction permits and export authorizations for LNG export facilities which are not yet built. Conversely, there are natural gas gathering and transmission facilities with construction essentially complete but without final authorizations to bring more gas to domestic and export markets. The LNG market is a complex system and investment is driven by many factors; government regulation being an important one. For this reason, the U.S. government should ensure that LNG export project regulatory certification and permits be reviewed and permitted consistently and transparently to allow the market to direct capital to construct facilities, which can provide relief to U.S., European, and global natural gas, and eventually related product prices. This is a long-term solution.

Natural gas infrastructure that supports LNG exports (needed for moving natural gas from production areas to tidewater) is also a critical link in the LNG value chain. This infrastructure is a constraint to increasing production in some basins. This infrastructure includes incremental natural gas production, gathering, compression, and pipeline transportation and storage. Addressing the permitting and related regulatory processes across federal, state, and local governments to ensure timely infrastructure development is anticipated to be a critical path item for increasing natural gas supply for domestic use and export. The NPC completed a comprehensive report on oil and natural gas infrastructure in 2019. An action item for the 120-day report will be to identify key areas (either value chain or geographic) of oil and natural gas infrastructure, which if resolved, could address constraints to increasing refined product, natural gas and LNG supply. The lead-time for the development of new

Page 12

<sup>&</sup>lt;sup>13</sup> Ibid, p. 3.

projects is many years, thus maximizing the existing and under construction system will be the primary focus of this review.

# **Temporarily Relax Diesel and Marine Diesel Sulfur Standards**

Diesel volumetric inventories across the majority of the U.S. system are low with winter demand season approaching. Relaxation of sulfur specifications for diesel may help increase supply of diesel, which could be consumed in domestic markets. Relaxing marine fuel sulfur standards introduced by the International Marine Organization implemented January 2020, known as IMO 2020, may also improve diesel supplies.

Additional geographical marine sulfur restrictions in Emission Control Areas (ECAs) in the United States and Europe could be relaxed to allow higher quality diesel to be directed to meet domestic demand. The government will need to weigh the benefits of these proposals against potentially higher emissions that may accompany such actions. Potential impacts to the long-term operability of diesel engines and emissions equipment would also need to be reviewed.

# Temporarily Relax RVP Standards and the RFG Requirements

Temporarily relaxing gasoline standards would increase the available supply of gasoline during summer months. During summer (June 1-September 15), the Reid Vapor Pressure (RVP) of the gasoline is lowered to manage air quality. The RVP is lowered furthest in the more densely populated areas, which are required to use reformulated gasoline (RFG). During times of emergency, increasing the RVP of the gasoline supplied would enable additional production of gasoline by blending higher RVP components such as butane. This can be achieved by either waiving the need for RFG in the RFG areas and allowing conventional gasoline with a higher RVP to be supplied or by temporarily increasing the RVP of the gasoline. The government will need to weigh the benefits of these proposals versus potentially higher emissions that may accompany them.

Immediate changes at this time are not recommended because summer ozone season has come to an end and U.S. markets are currently in transition to winter specifications.

# Jones Act - Facilitation of Waivers or Removal

The Jones Act requires the use of U.S. vessels for movements between U.S. ports. This increases the cost of moving products and hence the cost to the consumer as well as limiting the ability to resupply markets in times of disruption such as hurricanes. Supply via pipeline, particularly to the Northeast portion of the country has limited capacity. The United States already receives foreign imports using non-Jones Act vessels. Establishing a clear and flexible process for industry-wide Jones Act waivers in advance of an emergency would provide the ability to quickly waive Jones Act requirements in times of supply disruption. Waiving the Jones Act requirements would help improve emergency flows from supply regions, such as the U.S. Gulf Coast, to demand centers like the U.S. East Coast and the U.S. West Coast. These options will be developed in the final report along with the alternative of removing the requirements altogether to allow foreign vessels to move product between U.S. ports to improve supply flows and likely product prices. The final report will also review actual waivers granted in the aftermath of Hurricane Ian.

# **Postpone Rebuilding the Strategic Petroleum Reserve**

U.S. Strategic Petroleum Reserve (SPR) refilling should be delayed beyond 2023 to assure supply remains available to the markets. This will potentially help relieve upward price pressure by allowing commercial inventories to improve, as discussed earlier, versus pulling on already low inventories.

# Explore Options to Increase Further the Utilization of Spare Refining Capacity in China and Reduce Emissions Costs in Europe

While there has been some increase recently, the export quotas for fuels in China have resulted in under-utilization of the refining capacity despite the strong market signals. Increases in these quotas would likely help increase the supplies of petroleum products and hence ease price pressures.

The Emissions Trading Scheme in Europe impacts the cost of running refineries in Europe. As European supply is required to supply the world markets, these costs are impacting global product prices. Temporarily reducing or removing these costs would reduce the cost of petroleum products across the world, including in the United States.

### **EMERGENCY RESPONSE PREPAREDNESS**

One of the key questions included in the request from the Secretary of Energy was what steps should be taken to help response to disruptions such as hurricanes, cyber-attacks, etc.

Disruption in energy supply can take various forms, from lack of feedstock to industrial facilities (crude oil to refineries, natural gas to power plants) to interruption of utilities preventing shipment or delivery of energy, to weather, accidents, or intentional acts physically or virtually disabling key infrastructure such as pipelines or tankers. The ability of government and industry to jointly respond in an efficient manner will determine how widespread a disruption is and how long a disruption lasts.

The Emergency Preparedness work group (EPWG) has been set up to address what steps should be taken to enhance response to disruptions in the energy supply. The work group is reviewing the 2014 Enhancing Emergency Preparedness for Natural Disasters and 2016 Emergency Preparedness for Natural Disasters NPC studies. Since the publications of the 2014/2016 studies, much has been accomplished toward the recommendations.

When the Department of Energy (DOE) established the Office of Cybersecurity, Energy Security, and Emergency Response (CESER) in 2018, a heightened focus was brought to understanding and preparing for emerging threats and risks to the energy sector. Recommendations from the 2014/2016 studies were utilized along with partnerships from the Oil and Natural Gas Subsector Coordinating Council and Electricity Subsector Coordinating Council, to help align CESER with preparedness activities needed to carry out the agency's federally mandated response requirements.

After a year without a dedicated program manager focused on preparedness exercises, CESER hired in 2018 a seasoned program manager to lead training and exercise activities and further engage the sector and cross-sector partners in improving preparedness. This expertise has helped transform CESER's engagement across industry and has improved understanding of the Oil and Natural Gas value chains throughout the community. These exercises, such as the enhancements to CESER's annual all-

hazards Clear Path Exercise, have also contributed to increased coordination and has leveled expectations during real world incident responses.

CESER's response staff implemented elements of the National Incident Management System's (NIMS) Incident Command System (ICS) into its organization and its real-world incident response functions. The Emergency Support Function (ESF) 12 – Energy role evolved following several busy years of activations for exercises, severe storms, and the COVID-19 pandemic. The response program used these opportunities to validate the evolved response model and build positive rapport with the public sector partners as well as other government entities.

Trade associations, representing company owner and operators, provided liaisons, building relationships with, and emphasizing direct communications with CESER's Response and Restoration division. Relationship building and expectation development with the Response and Restoration division as well as the Energy Information Administration (EIA) contributed to increased situational awareness and positive Unity of Effort coordination calls during exercises and real-world incidents.

An area that requires additional improvement includes the partnership building between states and the oil and natural gas industry, specifically relating to energy assurance (security) planning. Increased awareness at the state level regarding the complexities of the oil and natural gas value chains, would support state energy preparedness and policy development and implementation. However, many of the recommendations made in the 2014/2016 studies have seen significant progress and are meant to be actions that are continuously improved upon, in collaboration between CESER and the sector partners.

Summary comments are provided below on progress to date in response to the 2014/2016 study recommendations. For the final report, the EPWG will further assess the 2014/2016 study recommendations and provide detailed feedback about the progress of each recommendation and identify areas where additional improvement may strengthen the agency's position in preparedness and response.

The EPWG will also review the scenarios considered in the 2014 and 2016 studies and assess whether new threats exist that deserve additional analysis. New threats might include previously unseen weather events like the 2021 Winter Storm Uri. After identification of these new threats, the team will determine if existing emergency response strategies are sufficient or if additional work is needed.

Energy infrastructure can allow supply to be rapidly restored following a disruption. This can be effective only if the infrastructure is available to operate and has enough capacity to "make up" for the original loss. A sizable amount of new infrastructure has been installed since the 2014 and 2016 studies. The team will review recent additions to the energy infrastructure by U.S. PADD regions to assess potential changes in capacity and redundancy to various disruption scenarios. This includes crude oil pipelines, natural gas transmission lines, propane infrastructure, and refined product infrastructure. If a given piece of infrastructure is responsible for a minor portion of the regional supply or transmission capacity, it is likely that short-term alternatives, including drawing down inventories or conservation, can help bridge the disruption. On the other hand, if one facility or one pipeline can result in a significant regional impact, further review and planning might be warranted to develop mitigating

strategies for a potential disruption. The 2021 Colonial Pipeline disruption from a cyber event is an example of a large piece of infrastructure causing a significant regional impact.

Finally, the EPWG will review potential enhancements to existing emergency response frameworks. The contributions of the Oil and Natural Gas Subsector Coordinating Council (ONG-SCC), the Oil and Natural Gas Information Sharing & Analysis Center (ONG-ISAC), and the Downstream Natural Gas Information Sharing & Analysis Center (DNG-ISAC) will be reviewed through an emergency preparedness lens along with existing state energy assurance or energy security plans. Coordination of work and clear roles and responsibilities will be assessed for improvement opportunities. The EPWG will also benchmark with the Electricity Subsector Coordinating Council (ESCC) for learnings that could be applied to this study scope. Opportunities will be identified for potential review and application in the future.

The full set of recommendations will be included in the final report.

For reference, the key findings and recommendations from the 2014 and 2016 NPC studies were as follows.

- 1. Guiding principles in restoring energy system to steady state operations following disruption
  - a. Responses to supply chain emergencies are best managed when there is advance planning, preparedness, and private- and public-sector collaboration.
  - b. Collaboration and coordination of activities are enabled through adhering to the established common frameworks and management systems.
  - c. Allowing markets to function normally provides for the quickest and most efficient restoration of supply to impacted areas.
  - d. Industry must conduct its operations in compliance with the law.
  - e. Industry is responsible for restoring oil and gas supply.
  - f. Priority for electricity restoration should be on critical infrastructure.
  - g. Supply chain interdependencies across segments/regions should be recognized.
  - h. Regulatory barriers to restoring supply should be removed through government-issued temporary regulatory relief, where possible.

### 2. Findings

- a. It is critically important for government emergency response organizations to have a baseline understanding of the dynamic nature of the oil and gas supply chains.
- b. Improved situational awareness about the status of oil and gas infrastructure and service disruptions from industry would enable DOE and other government agencies to more-effectively respond.
- c. A major challenge during emergency response is effective communication between and within federal and state agencies and with industry.
- d. The maintenance of trained, knowledgeable response organization within government agencies should be a priority along with a process to sustain it.
- e. Within industry and across all levels of government, leadership commitment and funding are required to continuously improve and ensure a state of readiness to respond to supply chain disruptions.

### 3. Recommendations

- a. Harmonize DOE's energy response team structure with the NIMS Incident Command System (ICS). Significant progress has been made and this integration has become part of DOE's Energy Response Team (ERT) culture.
- b. Leverage EIA's subject matter expertise within DOE's energy response team to improve supply chain situation assessments. *Progress has been made and EIA continues to integrate into DOE ERT assessments.*
- c. Establish company liaisons and direct communication with DOE's energy response team to improve situation assessments. This recommendation has been accomplished and will continue through the organization of the ONG SCC and designated trade representatives. Likewise, EIA may reach out to owners/operators independently.
- d. Streamline and enhance processes for obtaining temporary regulatory relief to speed up recovery. Significant progress has been made as DOE has enhanced its government-to-government coordination in supporting regulatory relief controlled outside of DOE and has enhanced its industry communications and collaboration to ensure the initial requests have the best information needed by government to review and assess approval for the relief.
- e. States should increase engagement with the oil and natural gas industry in their energy assurance plans, and industry members should assist states in such efforts. *This recommendation necessitates additional coordination and integration.*
- f. Both DOE and states should establish routine education and training programs for key government emergency response positions. *This recommendation necessitates additional coordination and integration.*
- g. Both DOE and states should improve their comprehensive drill and exercise programs and include industry participation. Reciprocal invitations extended by companies to DOE and states are recommended. Significant progress has been made and this continues to be a strength of the DOE ERT program.

### **KEY ITEMS TO ADDRESS IN THE FINAL REPORT**

The final (120-day) report will include:

- 1. An update of the supply/demand fundamentals and market conditions
- 2. Finalization of the recommendations and considerations to increase supply of refined products
- 3. The assessment of the effectiveness of the implementation of the recommendations from the 2014/2016 NPC emergency preparedness study and any new recommendations.

In addition, as per the request from Secretary Granholm, the final report will include:

4. An analysis of the changing global crude supply and impact on U.S.-based producers, suppliers, and refiners. The report will examine changes that are occurring in the global supply of crude,

- including the impacts of the Russian invasion of Ukraine as well as the impacts of sanctions. It will identify potential supply challenges in the near and medium term that should be evaluated further.
- 5. An assessment of the steps being taken and recommendations for the principles to help ensure a manageable transition towards a net-zero economy. This will include a summary of the different technologies being implemented and their readiness and potential pace of scale up and deployment. It will also include the principles to help ensure the transition is manageable, which will include, but not be limited to:
  - The recognition that through the transition all forms of energy will be needed
  - Focusing policies on eliminating emissions vs eliminating sources of energy
  - Ensuring policies are technology neutral and enable the market to function in encouraging technology development and deployment
  - The need for predictable fiscal regimes to allow development of and investment in both existing and new sources of energy.



# The Secretary of Energy Washington, DC 20585

July 29, 2022

Mr. Darren W. Woods Chair, National Petroleum Council Chairman and Chief Executive Officer Exxon Mobil Corporation 5659 Las Colinas Boulevard Irving, Texas 75039

Dear Mr. Woods:

Thank you for arranging an administrative meeting with the National Petroleum Council (NPC) at my request on July 1. In this meeting I shared my deep concern over the current crude oil and refined products supply and demand imbalance caused by multiple factors, underscoring the outsized impact from the unprecedented invasion of Ukraine. This imbalance continues to create upward pressure on oil prices, resulting in significant financial pain at the pump for the American people. President Biden is committed to alleviating this burden and taking steps to shore up supply, including calling on industry to increase private inventories to protect the American people. I appreciated your perspectives on how the NPC could help provide expert recommendation and analysis to help prepare and address this ongoing challenge.

As we focus on increasing the financial pressure on Vladimir Putin, we are dually focused on mitigating the negative impacts on the domestic economy. We recognize that U.S. refiners, producers, and the full supply chain are experiencing constraints, and as we look at the situation comprehensively, I informed you of the following areas that I am interested in receiving formal advice:

- How can we increase supply? Where is there efficiency and/or opportunity to increase current supplies of crude oil and refined products?
- What are current constraints and market hurdles to getting affordable products to U.S. consumers?
- How are companies reevaluating traditional emergency preparedness? Given the current tight market, how is industry making sure inventories are well supplied should there be a critical disruption from major and/or multiple storms, a cyberattack, or other unforeseen events that would cause refineries or pipelines to shut down? What additional actions can the government be taking in coordination with industry to help enhance preparedness?
- Where is industry taking steps and grasping opportunities to prepare for a net-zero economy? Right now, we are seeing impacts from an unmanaged transition.

What actions are being taken by industry to move to a more managed energy transition? What actions can the government take to support a more managed transition?

# I request the NPC to:

- 1. Provide within 30 days a written list of: (i) the ways industry is preparing to secure consistent, physical supply for the American people; and (2) near-term actionable steps the Administration can consider to help increase physical supply of oil and refined products while continuing safe, efficient operations and maintenance of production facilities.
- 2. Conduct analysis and issue a report within 120 days examining and providing an analysis of the changing global crude supply and how it will positively and/or negatively impact U.S.-based producers, suppliers and refiners; note expected supply challenges in the near term and medium term that should be evaluated further; and provide an update on ongoing work related to the steps the industry is taking to be an active player in a net-zero economy by 2050.

For the purposes of the study, I am designating Deputy Secretary David Turk as the official to whom the NPC reports and to represent me at NPC meetings. The Assistant Secretary for Fossil Energy and Carbon Management, Brad Crabtree, will work with Deputy Secretary Turk to provide the NPC with the information it needs to expedite the analysis and advice from the NPC.

In order to receive advice from the NPC in a time frame that will allow for consideration and action, I appreciate your written response to the near-term recommendations, and I will request the convening of a full NPC meeting following the 120 days to brief me on the results of this study.

Sincerely

Jennifer Granholm

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John H. Guy, IV Deputy Executive Director National Petroleum Council Marshall W. Nichols Executive Director National Petroleum Council From: Winn, Mara E

To: <u>Kumar, Puesh; Wills, Andrew C; Macintyre, Douglas; Muneer, Fowad; Neukomm, Monica</u>

Cc: <u>Buell, Kenneth; Cooksey, Justin (CONTR); Marko, Brian; Lemmond, Marc</u>

Subject: FW: National Petroleum Council: DRAFT — NPC Short-Term Response and Work Plan 10-19-2022

**Date:** Wednesday, October 19, 2022 1:25:08 PM

Attachments: Letter and DRAFT — NPC Short-Term Response and Work Plan 10-19-2022.pdf

Importance: High

### Good afternoon,

For your awareness, the draft response to S1 on the NPC Emergency Preparedness is attached and under review. It is high level just outlining the plan for the 120-day report. There is no action and we just wanted you to have this for awareness, but please let Ken or me know if you have any questions.

Best,

Mara

# Mara E. B. Winn

**Deputy Director** 

Preparedness, Policy, and Risk Analysis Division

Office of Cybersecurity, Energy Security, and Emergency Response (CESER)

U.S. Department of Energy

Office: 202-586-2934 | Mobile: 240-220-4719 | Email: mara.winn@hq.doe.gov

Pronouns She/Her

**From:** Pam Dunning <pdunning@npc.org> **Sent:** Wednesday, October 19, 2022 11:29 AM

To: Pam Dunning <pdunning@npc.org>

Subject: [EXTERNAL] National Petroleum Council: DRAFT — NPC Short-Term Response and Work

Plan 10-19-2022 **Importance:** High

# TO ALL MEMBERS OF THE STEERING COMMITTEE OF THE PROPOSED NPC COMMITTEE ON SHORT-TERM ACTIONS AND TRANSITION STRATEGIES

### Dear Member:

Attached is a letter from Darren Woods, Committee Chair, transmitting the proposed final draft of the 30-day NPC response to the Steering Committee for its review. Please note that comments are requested by Tuesday, October 25, 2022.

Should you encounter a problem opening the attachment, please contact me.

Thank you.

Pam Dunning National Petroleum Council (b) (6) (cell)

This message does not originate from a known Department of Energy email system. Use caution if this message contains attachments, links or requests for information.

\*

An Oil and Natural Gas Advisory Committee to the Secretary of Energy

1625 K Street, N.W. Washington, D.C. 20006-1656

# VIA E-MAIL

October 19, 2022

TO ALL MEMBERS OF THE STEERING COMMITTEE OF THE PROPOSED NPC COMMITTEE ON SHORT-TERM ACTIONS AND TRANSITION STRATEGIES

### Dear Member:

Attached please find the proposed final draft of the Committee's work plan, which will also serve as the first response to Secretary Granholm's July 29, 2022, request. The document describes the efforts that the Committee has underway to provide the requested advice on emergency preparedness planning, evolving global markets, and industry actions, both underway and planned, in support of the goal of a net-zero economy by 2050. To put these efforts into perspective, the draft provides an informative narrative of historical oil and natural gas supply and demand. This narrative is responsive to the Secretary's request for specific information.

I do not believe we need to have a meeting to discuss the proposed work plan, especially as a number of us have been involved in its development. However, I do request that you review the attached document and provide any comments and/or corrections you may wish considered in finalizing the draft for full Committee consideration and for coverage in the final report. Please send your comments to Andy Madden <a href="mailto:andy.w.madden@exxonmobil.com">andy.w.madden@exxonmobil.com</a>, who is leading the Subcommittee pulling together the output of the Committee's three workstreams, with a copy to Marshall Nichols <a href="mailto:mpc.org">mnichols@npc.org</a>, by next Tuesday, October 25, 2022.

Sincerely yours,

Darren W. Woods

Chair, Proposed NPC Committee on Short-Term Actions and Transition Strategies

Phone: (202) 393-6100

Fax: (202) 331-8539

Attachment

cc: Subgroup Participants

# **National Petroleum Council**

# Work Plan for Response to Secretary Granholm Letter of July 29,

# 2022

### INTRODUCTION

In mid-June 2022, President Biden wrote to seven major refiners in the United States concerning his views on the energy situation and its impacts. In those letters, he stated that he was directing the Secretary of Energy to convene an emergency meeting and engage the National Petroleum Council (NPC). As a result, Secretary Granholm requested a meeting with the NPC's Cochairs' Coordinating Committee (CCC), given that a purpose of the CCC is to discuss emerging issues with the Secretary and to discuss whether an NPC study would be useful. The CCC had a productive meeting with the Secretary on July 1st and provided the Committee members' individual views on the then current situation and potential actions that could be taken in response. Subsequently, by letter dated July 29, 2022, the Secretary requested the Council provide certain information and formal advice on these topics. The Secretary's letter, in part, requested:

- 1. Details, within 30 days, of (a) how industry is working to supply oil and refined products to meet U.S. demand; and (b) near-term steps the Administration can consider to increase U.S. supply.
- An analysis, within 120 days, of (a) the evolving global oil market and its implications on U.S. supply; and (b) industry efforts to support a net-zero economy by 2050.

As required by the Council's Articles of Organization, the NPC Agenda Committee reviewed the Secretary's request, and recommended that the request be accepted. In a follow-up discussion, Deputy Secretary of Energy David Turk explained that implicit in both the 30-day and 120-day requests is the desire to have the NPC's views on ways to improve government and industry coordination in responding to incidents of significant supply disruptions.

Consistent with the Agenda Committee's favorable recommendation, Deputy Secretary Turk's clarification, and in accordance with the Council's Articles of Organization's provision for addressing urgent requests from the Secretary, the Council:

- Utilized the membership of the Cochairs' Coordinating Committee, expanded as necessary, to respond, and constitute an NPC Committee on Short-Term Actions and Transition Strategies.
- Appointed Vice Chairs to lead three work streams:
  - Short-term industry and government actions
  - Emergency preparedness planning
  - Evolving global markets and the transition to net zero.

Attachment 1 provides a copy of the Secretary's July 29, 2022, letter, and Attachment 2 provides rosters of the Committee on Short-Term Actions and Transition Strategies and its subgroups.

# **Report Objectives**

Secretary Granholm requested the NPC to provide a list of (1) the ways industry is preparing to secure consistent, physical supply for the American people, and (2) near-term actionable steps the Administration can consider to help increase physical supply of oil and refined products while continuing safe, efficient operations and maintenance of production facilities. "Supply" was clarified to refer to crude oil, refined petroleum products, natural gas, and natural gas liquids.

Other questions were raised in the Secretary's letter:

- How can we increase supply? Where is there efficiency and/or opportunity to increase current supplies of crude oil and refined products?
- What are current constraints and market hurdles to getting affordable products to U.S. consumers?
- How are companies reevaluating traditional emergency preparedness? Given the current tight market, how is industry making sure inventories are well supplied should there be a critical disruption from major and/or multiple storms, a cyber-attack, or other unforeseen events that would cause refineries or pipelines to shut down? What additional actions can the government be taking in coordination with industry to help enhance preparedness?

Finally, the Secretary requested that the final report provide an analysis of the changing global crude oil supply and the impacts on U.S.-based producers, suppliers, and refiners, as well as steps being taken by the industry to be an active player in a net-zero economy by 2050.

### Approach Taken

The NPC Committee on Short-Term Actions and Transition Strategies organized three work groups to help develop this work plan and the final report. Importantly, the final report will include, in addition to more detail on the matters discussed in this document, a review of steps being taken to help ensure a manageable transition to a net-zero economy. The three groups were organized to pull together expertise to address the questions as follows:

- Short-Term Industry and Government Actions Compile a list of actions being taken and suggested government actions that may assist in increasing supply of crude oil, refined products, natural gas, and natural gas liquids.
- Emergency Preparedness Planning Review the NPC study from 2014 and the supplement from 2016 to assess whether the findings are still relevant and the status of implementation as well as incorporating learning from more recent supply disruptions.
- 3. Evolving global markets and transition to a net-zero economy by 2050 Outline the principles to be adhered to in order to enable a manageable transition.

Unless otherwise noted, the sources of the data in this document are the EIA annual and monthly production data, inputs, and utilization data, as well as import/export data and weekly product supplied data.

### PETROLEUM MARKET OVERVIEW AND RECENT DEVELOPMENTS

### Overview of U.S. Petroleum Markets

The United States is the world's largest energy-producing country, providing crude oil and energy products across the globe.<sup>1</sup>

Crude oil, products, natural gas liquids, and natural gas transactions are negotiated by buyers and sellers using references from various domestic and global market hubs such as NYMEX, Brent, Dubai, etc., with thousands of participants every day. Prices can vary based on location, quality, grade, availability, and a number of other factors.

Primary drivers for commodity prices are supply, demand, and inventories. For example, when demand increases and local inventories are low, prices will typically increase. The available industry refining capacity is fixed in the short term as new refining capacity developments typically take multiple years to plan, permit, and build. As such, supply cannot typically quickly adjust and fix any short-term deficits versus demand. Prices in this case, therefore, move higher to incentivize imports from other parts of the world and reduce demand until supply and demand are near equilibrium. Conversely, in times of reduced demand and oversupply, prices will fall to drive lower production.

In 2022, according to Department of Energy, Energy Information Administration (EIA), U.S. volumetric inventories of crude, gasoline, and diesel have all trended below the 5-year average. These low inventories, along with limited domestic supply and the supply disruption from the Russian-Ukrainian conflict, drove prices to near record levels as demand recovered in 2022.

### **Crude Oil**

U.S. crude oil production has increased significantly from an average annual 5.0 million barrels per day in 2008 to 12.9 million barrels per day in December 2019, according to the EIA. This time period is often referred to as the "Shale Revolution." In 2020, COVID had a significant impact on refined products demand, which resulted in low prices for products and crude as the market responded to the oversupply. As a result, U.S. crude production fell to a low of 9.7 million barrels per day in May of 2020, partially recovered through 2021 and 2022, and as of June 2022 was back up to near pre-COVID highs at 11.8 million barrels per day.

Despite being the world's largest crude producer, the United States remains a net importer of crude. According to the EIA, the U.S. imported 2.9 million barrels per day on a net basis in the first half of 2022 (over 6.2 million barrels per day of typically medium and heavy sour crude imports partially offset by 3.3 million barrels per day of generally lighter, sweeter crude exports). Canada is the largest exporter of crude to the United States, supplying a net average of 3.5 million barrels per day during the January-June 2022 time period.

Crude oil prices globally have been very volatile over the last two years, driven by changing supply and demand – first with the drop in demand caused by COVID-19 leading to high inventories and low prices, followed by an increase in demand and tighter supply/demand leading to higher prices. The

<sup>&</sup>lt;sup>1</sup> BP, Statistical Review of World Energy – 2022, <a href="https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-us-insights.pdf">https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-us-insights.pdf</a> (accessed September 20, 2022).

global petroleum markets are linked to the United States and are a key part of global market dynamics and price fluctuations.

### **Refined Products**

The U.S. refined product transportation system relies heavily on product supplies from both U.S. refiners and foreign imports. An extensive logistics and infrastructure system moves products primarily from industry refining centers in the U.S. Gulf Coast and the Midwest to demand centers across the country. As necessary, marine movements of crude, products, and natural gas liquids supplement the onshore pipeline system. Marine movements between U.S. ports require Jones Act vessels that use U.S. built and owned ships with U.S. crews. Meeting shipping requirements of the Jones Act is generally more expensive than international alternatives.

The U.S. refining industry has made significant investments over many years in the capability to cost-effectively process hard-to-refine heavy and sour crudes. That said, many U.S. refineries are not a good match for the growing production of U.S. light sweet crude from unconventional shale. The most cost-effective production of U.S. products requires the import of heavy, hard to refine crudes and export of some of the lighter, sweeter domestic crudes.

As the United States is in the midst of the 2022 hurricane season, ending November 30, with gasoline and diesel inventories below their 5-year volumetric averages, policy makers have voiced concern that adequate supply may not exist to meet demand requirements across the entire United States and particularly in the Northeast, where supply is dependent on movements from the U.S. Gulf Coast and foreign imports.

### Natural Gas Liquids (NGLs)

Supply of NGL products, specifically including propane, have increased over the last five years due to the Shale Revolution. According to the EIA, propane production from gas processing increased from about 1.5 million barrels per day in the first half of 2019, to approximately 1.8 million barrels per day during the same time period in 2022. This 18% increase (almost 280 thousand barrels per day) makes propane one of the few commodities surpassing 2019 (pre-COVID) production.

According to the EIA's September 2022 Short-Term Energy Outlook (STEO), Q3 propane inventories are over 5 million barrels above 2021. Further, the EIA STEO domestic demand outlook for Q4 2021 and Q4 2022 is essentially flat at approximately 960 thousand barrels per day. As U.S. production has increased, the United States has exported the excess supply to Europe and Asia.

# **Natural Gas**

The United States is the world's largest producer of natural gas and has been a net exporter of natural gas since 2017, primarily due to the Shale Revolution and associated boom in horizontal drilling and hydraulic fracturing. A meaningful amount of the U.S. natural gas production is directly related to crude oil production (associated natural gas). When crude oil production increases, associated natural gas production also increases.

Within the United States, natural gas is generally moved from production regions to domestic demand centers by pipeline. The United States also exports natural gas in the form of liquefied natural gas (LNG) that is cooled to -260° F, via large liquefaction facilities primarily located on the Gulf Coast.

Increasingly fragile European natural gas supply security amid the Russian invasion of Ukraine has led to a heightened focus on enhancing the United States' ability to supply Europe and the rest of the world with LNG.

The EIA highlighted in a recent report<sup>2</sup> that as of July 2022, the United States now has more LNG export capacity than any other country and currently exports more LNG than any other country. U.S. LNG exports averaged 11.1 billion cubic feet per day during the first half of 2022.

# Petroleum Markets – Development Over the Last 3 Years

The elevated crude oil and transport fuel volumetric inventories of 2020 and 2021 had by early September 2022 moved below the 5-year averages. Generally, in periods of low inventories and increasing demand, prices tend to be higher than historical averages and this is true today.

A number of factors over the last few years have set the stage for the supply, demand, and inventory fundamentals seen today. These include COVID-19, the response from the Organization of Petroleum Exporting Countries (OPEC) and additional partner countries collectively known as OPEC+, and more recently, the Russian invasion of Ukraine.

### **Product Demand**

On January 20, 2020, the CDC reported the first laboratory-confirmed case of the 2019 Novel Coronavirus (COVID-19) in the United States.<sup>3</sup>

By late February/early March 2020, U.S. energy markets were being impacted. Various states began implementing shutdowns of schools, businesses, public facilities, restaurants, and travel in order to prevent the spread of COVID-19, significantly reducing product demand. Gasoline was particularly impacted, falling almost 45% according to the EIA.

The EIA Weekly U.S. Product Supplied of Finished Motor Gasoline, which reflects demand, week ending February 28, 2020, was 9.19 million barrels per day. Only a month later, week ending April 3, 2020, demand had fallen to 5.1 million barrels per day, a drop of over 4 million barrels per day.

Demand for jet fuel also dropped as airlines began shutting down domestic and international flights. Diesel demand also fell, although not as drastically as gasoline motor fuel and jet fuel.

Although product demand has recovered since the lows of 2020, global and U.S. demand remains below pre-COVID-19 levels. EIA U.S. gasoline monthly product supplied (demand), June 2022, is approximately 6% below June 2019.

# Refinery Runs (Crude Oil Demand/Product Supply)

As demand for transportation fuels fell during the COVID-19 lockdowns, refinery margins dropped to the lowest sustained level in history as the available refining capacity far exceeded demand.

<sup>&</sup>lt;sup>2</sup> EIA, U.S. LNG export capacity to grow as three additional projects begin construction, September 6, 2022, <a href="https://www.eia.gov/todayinenergy/detail.php?id=53719#">https://www.eia.gov/todayinenergy/detail.php?id=53719#</a> (accessed September 27, 2022).

<sup>&</sup>lt;sup>3</sup> Centers for Disease Control and Prevention, Early 2020, <a href="https://www.cdc.gov/museum/timeline/covid19 html">https://www.cdc.gov/museum/timeline/covid19 html</a>, (accessed September 20, 2022).

U.S. refiners lowered production in response. The EIA's Weekly Inputs & Utilization report, week ending December 27, 2019, reported refinery crude oil runs of 17.28 million barrels per day. However, by week ending May 8, 2020, U.S. refinery runs fell to 12.4 million barrels per day, a drop of 4.9 million barrels per day (25%). The lowest level of crude oil runs, since August 20, 1982, was reported week ending February 26, 2021, when U.S. refinery runs hit a low of approximately 9.9 million barrels per day, a drop of over 7 million barrels per day (40%), with Winter Storm Uri contributing to the reduction. Similar lower production actions were also taken by refiners outside the United States.

In this low-margin environment, several refineries permanently shut down, globally and in the United States. According to a report prepared by ESAI Energy (July 2022), between 2019 and early 2022 the U.S. and Eastern Canada refinery system shut down approximately 1.5 million barrels a day of refinery capacity, over 8% of the December 2019 run levels mentioned above. Further, Facts Global Energy Group's (FGE) Annual World Refining Outlook (June 2022), showed global refinery rationalization near 5 million barrels per day for the same time frame.

As demand recovered through 2021 and 2022, the remaining U.S. refineries, and similarly those in most of the rest of the world, quickly increased the utilization of available refining capacity to meet the transportation fuels demand recovery. A notable exception is China, where substantial refining capacity has been added but is not being utilized due to the imposition of export quotas.

Global demand for crude has slowly recovered from May of 2020 to today as the world has largely learned how to live with COVID-19. According to EIA, U.S. refining crude demand has increased from the monthly lows in April 2020 by approximately 3.7 million barrels per day as of June 2022.

### **Crude Oil Production (Supply)**

Globally, according to the International Energy Agency (IEA), demand for oil liquids declined by 25 million barrels per day or 25% in the 2nd quarter of 2020. However, crude oil supply was slower to respond. OPEC produced at a near record rate in April of 2020 at 30.7 million barrels per day, termed "Black April" by the IEA's May 2020 Oil Market Report. After Russia and Saudi Arabia were unable to agree on actions to address the emerging global pandemic, Saudi Arabia produced almost 12 million barrels per day in April, an increase of more than 2 million barrels per day above the prior month.

With supplies exceeding demand, inventories built at an unprecedented rate and prices plummeted, with WTI crude in Cushing posting a record low price of -\$37.63 per barrel on April 21, 2020.

In the face of significant financial distress associated with the lower crude prices, exploration and production companies cut back their activity levels and associated production fell significantly. According to the Weekly U.S. Field Production of Crude Oil reported by the Department of Energy, Energy Information Administration (EIA), crude production was 13.1 million barrels per day during the week ending February 28, 2020. By the week ending August 28, 2020, production was 9.7 million barrels per day, a drop of 3.4 million barrels per day (25%).

As a result of the low demand, and falling prices, drilling activity slowed significantly in all U.S. basins. At the end of 2019, Baker Hughes total rig count was over 800 rigs; however, by early May 2020,

Page 6

<sup>&</sup>lt;sup>4</sup> International Energy Agency, Oil Market Report, May 14, 2020, p. 3.

that count was cut in half. Rig counts continued to drop in subsequent months, going below 300 rigs at the lowest points.

OPEC+ also took steps to reduce crude oil production. On April 12, 2020, OPEC+ announced a plan to restore stability to crude markets by reducing their aggregate crude production by 9.7 million barrels per day or approximately 10% of global oil liquids supply, and then slowly increased their crude supply back to more normal levels from May 2020 through September of 2022.

For most of 2020 and 2021, Organization for Economic Co-operation and Development (OECD) commercial inventories remained elevated and crude prices remained low. In response, exploration and production companies maintained low levels of investment and production maintenance. These lower investment levels, coupled with ongoing natural field decline, left most of the world's crude producers poorly positioned to quickly increase supplies to meet recovering demand. IEA data show that global crude supply is down approximately 6% when comparing 2019 to 2021 annual averages.

Through this period, U.S. monthly crude production initially fell from a high of nearly 13 million barrels per day in 2019 to 9.7 million barrels in 2021, and subsequently increased to 11.8 million barrels per day in July 2022, an increase of 2.1 million barrels per day.

Despite the increase in U.S. production and the slow but steady production increases by OPEC+, OECD crude commercial inventories remain below 5-year averages. IEA OECD crude oil inventories, July 2022, are about 14% below the 2019 highs and approximately 15% below the 5-year average.

### **Natural Gas**

As energy demand increased with the global economic recovery from the pandemic, the immediate increase in natural gas demand was largely met via supplies from the completion of DUCs (drilled but uncompleted wells). A combination of supply chain and labor challenges, as well as infrastructure constraints has limited the increase in production growth despite high prices. Although production has increased modestly, demand growth has outpaced production growth as consumption in the electric sector remains high. According to the EIA, "We expect U.S. production of dry natural gas to increase in 2022, but not as much as demand." They go on to say expectations are natural gas demand will remain above 2021 levels.

Global natural gas demand has further been supported by new LNG liquefaction facilities coming online on the U.S. Gulf Coast.

### **Russian Invasion of Ukraine**

In late February 2022, Russia invaded Ukraine. In response to the invasion, several countries, including the United States, implemented various forms of sanctions. Many corporations also announced efforts to reduce or eliminate their operations in Russia.

<sup>&</sup>lt;sup>5</sup> EIA, EIA expects U.S. natural gas prices to remain high through 2022, June 9, 2022, <a href="https://www.eia.gov/todayinenergy/detail.php?id=52698">https://www.eia.gov/todayinenergy/detail.php?id=52698</a>. (accessed September 27, 2022)

U.S. sanctions prohibiting the import of any Russian energy commodities were issued in March 2022. Although the United States was not a large importer of Russian crude oil or finished gasoline, it was an importer of Russian diesel, residual fuel oil, and vacuum gasoil used as feedstock for gasoline producing refinery units.<sup>6</sup> The loss of these feedstocks further reduced the ability of U.S. refiners to produce gasoline motor fuel.

Although actual volumes vary month-to-month, Europe has historically been a large importer of Russian crude, diesel, and natural gas to supply their domestic demand. European sanctions, including voluntary action to not buy Russian crude and products by companies, are impacting the global markets. Russian barrels are travelling further to reach alternative customers and Europe and the United States are sourcing replacements that are also further away. These changes have created a less efficient global shipping market leading to higher freight rates. Recent product tanker rates are at the highest level for over two decades according to Clarksons Shipping Co.<sup>7</sup> Russian oil tanker exports are changing from regional ports in Europe to long-haul destinations such as China and India, pushing rates to higher levels according to shipping company Evercore.

With various restrictions on Russian crude oil and products, they have become significantly discounted versus non-Russian crude and products. Despite the restrictions, reports indicate Russian crude and refined products production is relatively unchanged, pre and post invasion, as some countries continue to import. As an example, India has increased their purchase of Russian crude due to lower crude costs. However, Russian crude production could drop by 800 thousand barrels per day to 10.2 million barrels per day by December 2022 as the EU embargo comes into full effect, according to the IEA.

Europe has long been a large importer of Russian natural gas to meet its domestic demand. In particular, Germany imports natural gas from Russia via the Nord Stream 1 pipeline. Russia has curtailed flows on Nord Stream 1 throughout the year, and in late August 2022, gas flows fell to zero. As a result of Russian pipeline curtailments, Europe has been forced to meet much of its natural gas demand by buying LNG from the global market. This increased demand is supporting global LNG prices. European policy makers are concerned there may be insufficient natural gas to meet European demand this winter, when supply is needed most. While European gas storage is currently at a relatively healthy level, these stocks can be quickly depleted in the event of sustained cold weather.

### **China Position**

Although data from China are not widely reported, various IEA Oil Market Reports show demand was, and continues to be, impacted by China's zero-COVID policy. September's 2022 IEA Oil Market

<sup>&</sup>lt;sup>6</sup> EIA, The United States imports more petroleum products than crude oil from Russia, March 22, 2022, https://www.eia.gov/todayinenergy/detail.php?id=51738# (accessed September 27, 2022)

<sup>&</sup>lt;sup>7</sup> Irina Slav, The Energy Market's Next Crisis: Oil Tanker Shortages, September 14, 2022 <a href="https://oilprice.com/Energy/Energy-General/The-Energy-Markets-Next-Crisis-Oil-Tanker-Shortages html">https://oilprice.com/Energy/Energy-General/The-Energy-Markets-Next-Crisis-Oil-Tanker-Shortages html</a>. (accessed September 27, 2022)

<sup>&</sup>lt;sup>8</sup> Shruti Menon, BBC News, Ukraine crisis: Russian oil turns to Asia, September 16, 2022, <a href="https://www.bbc.com/news/world-asia-india-60783874">https://www.bbc.com/news/world-asia-india-60783874</a> (accessed September 27, 2022)

<sup>&</sup>lt;sup>9</sup> International Energy Agency, Oil Market Report, September 14, 2022, p. 14.

Report has Chinese refinery throughput for July 2022 at 12.8 million barrels per day versus a maximum demonstrated rate of over 15 million barrels per day.

Also, the EIA reports that China will add an additional 1.1 million barrels a day of refining capacity in 2022, bringing total nameplate capacity to 19.2 million barrels per day, in anticipation of future domestic demand.

According to FACTS Global Energy Group (FGE),<sup>10</sup> mid-2021, China strengthened State control of oil liquids imports and exports and concurrently reduced the export quotas for gasoline, diesel, and jet fuel. As a result of this China policy, fuel exports were cut in half between the first half of 2021 and the first half of 2022 according to FGE.

Chinese refinery utilization declined with lower domestic demand due to COVID-19 lockdowns, lower exports, and the growth in its refining capacity. According to IEA and FGE reports, China currently has the largest concentration of spare global refining capacity, assessed at more than 6 million barrels per day. While China has recently slightly increased export quotas, a recent report from FGE states that China could increase fuel exports up to 1.2 million barrels per day if they removed quota restrictions completely.

### **Current Market Conditions**

Due to the factors described earlier, as of early September 2022 volumetric inventories are at or below the historical 5-year averages for almost all oil and gas commodities. According to the IEA and EIA, crude inventories in the United States, Europe, and OECD all remain below the 5-year averages. Motor fuel gasoline and diesel volumetric inventories are also below the 5-year average in the United States, Europe, and OECD. Although there are variances within the various regions, volumetric inventories have not recovered to their pre-COVID levels.

As of early September 2022, PADD I industry gasoline inventory is consistent with historical levels. EIA data show that PADD I inventories of total gasoline and ethanol averaged 60 million barrels during the summer and are entering September at 59.3 million barrels. While this is on the low end of the typical volumetric range, it is important to note that PADD I gasoline demand through June was 9% below the 2017 to 2019 average of 3.3 million barrels per day. On a Days of Supply basis, industry gasoline inventories are at near normal levels. Adding surplus inventory above what is needed to efficiently manage the supply chain increases costs to consumers due to increased carrying costs. A further consideration when evaluating gasoline stock levels is the seasonal change of gasoline specifications, especially from winter to summer when inventories must be carefully managed as winter spec gasoline cannot be sold in summer without EPA waiver.

Historically, PADD I secures incremental supply by importing foreign barrels; approximately 0.5 million barrels per day of imports are required to meet typical PADD I motor gasoline demand.

Since mid-2021, PADD I diesel inventories have been at or below the pre-pandemic 5-year range as global diesel supplies are tight and market signals have not encouraged growth of commercial inventories to meet normal demand. While the inventories of diesel are currently low, EIA data show

Page 9

<sup>&</sup>lt;sup>10</sup> Facts Global Energy Group, Annual World Refining Outlook 2022, June 2022, used by permission.

that in prior major storms impacting U.S. Gulf Coast refining capacity, unlike gasoline stocks, diesel inventories do not experience significant draws.

Global diesel prices may remain high as Europe implements sanctions on Russian diesel imports. These sanctions may cause temporary disruptions as global trade flows adjust, including re-directing current exports from South America to Europe as Russian barrels likely find homes in South America, Africa, and the Middle East as European sanctions take hold. With diesel supplies likely to remain tight, in the event of a disruption such as a hurricane in the USGC, enabling efficient resupply through steps like a waiver of the Jones Act requirements while allowing the market signals to drive industry response will be the most effective response. This will be addressed in more detail in the final report.

Further, high natural gas prices and carbon taxes in Europe have increased European refiners' cost to produce refined products, reducing utilization. The world needs European refineries to run to meet global demand. Refined product prices have currently adjusted globally to cover the higher cost of European refining.

As discussed earlier, global natural gas prices are also supported with anticipated extreme shortages in Europe as Russia ceases gas pipeline flows. Europe's continued reliance on other countries for LNG supply can be expected.

### Summary

Global petroleum markets and the U.S. market have gone through very extreme fluctuations in the last 3 years driven by the unprecedented demand destruction caused by COVID-19 and the subsequent recovery, as well as the invasion of Ukraine. Despite the extreme nature of the demand fluctuations, the global market has facilitated industry adjusting to rebalance. The low prices during the demand destruction resulted in production decreases and the higher prices have stimulated the response across the industry to rebuild supply. Throughout this period, the markets have remained supplied through the actions taken by all in the industry. U.S. crude production is back to near record levels and refinery utilization is at all-time highs to meet the current demand.

While global and U.S. inventories are at the lower end of historical levels, they are at a sufficient level to meet ongoing supply. Allowing the global market to function effectively has been the single most important factor in keeping the markets balanced and supplied.

### PRELIMINARY RECOMMENDATIONS FOR CONSIDERATION

As the United States faces lower crude and product inventories, and hurricane potential remains, the administration has requested short-term recommendations from industry to mitigate potential supply shortages and higher prices. The government will need to weigh the benefits of some of these proposals versus potentially higher emissions that may accompany them. The following list is potential steps that have been discussed with the Administration to be taken. The final report will include a more definitive set of recommendations.

### **Support Continued Crude Oil and Products Exports**

Petroleum liquids markets are global. Free, unrestricted trade is key for the efficient operation of markets and enabling lowest cost supply. Export bans would interfere with the efficient flow of crude, products, and natural gas, exacerbate the tight supply/demand balance, and increase prices to consumers. For these reasons, U.S. exports should not be restricted.

### **Crude Oil**

The United States is a net importer of crude oil, dependent on other countries for approximately 2.9 million barrels per day of crude supply.

Initially, a crude oil export ban would likely drive global crude prices higher. The U.S. exports crude — primarily light, sweet crude — to global markets as these crudes are generally more suitable for use in less complex overseas refineries. If these exports are halted, global prices would likely escalate due to limited re-supply options for those refiners to meet their overseas demand.

Conversely, the U.S. system has limited ability to economically process incremental volumes of light sweet crudes. If exports are not permitted, U.S. sweet crude inventories could build, and U.S. crude production would likely be reduced.

Additionally, many trade partners could place retaliatory bans on the United States, limiting imports of the heavier sour crudes into the United States needed to maximize yields of gasoline, diesel, and other products, potentially driving further price escalation.

### **Refined Products**

An export ban on U.S. refined products would likely lead to higher prices for consumers and lower supply. Currently, prices and margins are incentivizing refiners to produce at maximum rates. A ban of exports would likely reduce domestic refinery utilization and hence production of products, reducing global supply and likely causing marginal prices to rise.

The United States currently exports approximately 1.5 – 2.1 million barrels per day of gasoline and diesel, with the majority going to Latin America. The United States supplied 12.1 percent of refined oil exports globally, making it the top refined product exporter in 2021. There are several countries (e.g., Mexico, Canada, Brazil, and Chile) that rely on U.S. product exports. Initially, a product export ban may push domestic prices down in exporting regions like the U.S. Gulf Coast but regions dependent upon imports, like the U.S. East Coast, would need a substantial price increase to attract imports. There is insufficient infrastructure to move the excess product that would be trapped in PADD III (the U.S. Gulf Coast) to PADD I (the U.S. Northeast) where it would be needed. The overall loss of production of products would result in higher prices globally and hence in the United States.

A product export ban would result in the lower utilization, or potentially closure of those U.S. refineries with significant export demand, reducing overall product supply and pushing global product

Page 11

<sup>&</sup>lt;sup>11</sup> Ibid, p. 37

prices up; leading to higher product prices for most U.S. fuel consumers, a net loss of U.S. GDP, and U.S. iobs.<sup>12</sup>

Once European Union sanctions on Russian oil product imports are fully in place in February 2023, U.S. exports to Europe will likely be needed to meet European Union demand. Rather than creating additional barriers to trade, working with global trade partners to break down existing barriers will result in more resilient energy markets and the lowest cost to consumers.

### **Temporarily Relax RVP Standards and the RFG Requirements**

Temporarily relaxing gasoline standards would increase the available supply of gasoline during summer months. During summer (June 1-September 15), the Reid Vapor Pressure (RVP) of the gasoline is lowered to manage air quality. The RVP is lowered furthest in the more densely populated areas, which are required to use reformulated gasoline (RFG). During times of emergency, increasing the RVP of the gasoline supplied would enable additional production of gasoline by blending higher RVP components such as butane. This can be achieved by either waiving the need for RFG in the RFG areas and allowing conventional gasoline with a higher RVP to be supplied or by temporarily increasing the RVP of the gasoline. The government will need to weigh the benefits of these proposals versus potentially higher emissions that may accompany them.

Immediate changes at this time are not recommended because summer ozone season has come to an end and U.S. markets are currently in transition to winter specifications.

### Jones Act – Facilitation of Waivers or Elimination

The Jones Act requires the use of U.S. vessels for movements between U.S. ports. This increases the cost of moving products and hence the cost to the consumer as well as limiting the ability to resupply markets in times of disruption such as hurricanes. Supply via pipeline, particularly to the Northeast portion of the country has limited capacity. The United States already receives foreign imports using non-Jones Act vessels. Establishing a clear process for industry-wide Jones Act waivers in advance of an emergency would provide the ability to quickly waive Jones Act requirements in times of supply disruption. Alternatively, removing the requirements altogether would allow foreign vessels to move product between U.S. ports and would likely improve supply flows and hence product prices. Waiving or eliminating the Jones Act requirements would help improve flows from supply regions, such as the U.S. Gulf Coast, to demand centers like the U.S. East Coast and the U.S. West Coast. These options will be developed in the final report, which will also review actual waivers granted in the aftermath of hurricane lan.

### **Temporarily Relax Diesel and Marine Diesel Sulfur Standards**

Diesel volumetric inventories across the majority of the U.S. system are low with winter demand season approaching. Relaxation of sulfur specifications for diesel may help increase supply of diesel, which could be consumed in domestic markets. Relaxing marine fuel sulfur standards introduced by the International Marine Organization implemented January 2020, known as IMO 2020, may also improve diesel supplies.

<sup>&</sup>lt;sup>12</sup> American Council for Capital Formation, "Economic Impacts of a Potential Ban on U.S. Refined Product Exports," p. 3, July 2022.

Additional geographical marine sulfur restrictions in Emission Control Areas (ECAs) in the United States and Europe could be relaxed to allow higher quality diesel to be directed to meet domestic demand. The government will need to weigh the benefits of these proposals against potentially higher emissions that may accompany such actions. Potential impacts to the long-term operability of diesel engines and emissions equipment would also need to be reviewed.

### **Postpone Rebuilding the Strategic Petroleum Reserve**

U.S. Strategic Petroleum Reserve (SPR) refilling should be delayed beyond 2023 to assure supply remains available to the markets. This will potentially help relieve upward price pressure by allowing commercial inventories to improve, as discussed earlier, versus pulling on already low inventories.

### Certification and Permitting of Oil and Gas Infrastructure including LNG Export Facilities

Over the longer term, investment in oil and natural gas production and logistics facilities will help increase supply and therefore reduce prices. Certification and permitting of these facilities throughout the value chain is frequently the rate-determining step in constructing these facilities. Ensuring that permitting and regulatory processes have clarity and certainty and are effective and efficient will be a key factor in ensuring adequate, cost-effective supply of crude oil, natural gas, and refined products. A constraint in any part of the value chain has the potential to inhibit those investments that would increase supply.

The shortage of natural gas in Europe due to the disruption of Russian supply is impacting European energy costs and is increasing global petroleum product prices as natural gas is required to run refineries. Increasing U.S. LNG exports would have the potential to improve European gas supply, which would reduce prices and improve European refinery operating costs.

Global LNG demand exceeds supply, and a key question is to what extent and how fast could U.S. natural gas production, transportation, and LNG export capacity increase to help the European and global LNG market. Currently, there are approved construction permits and export authorizations for facilities which are not yet built. The LNG market is a complex system and investment is driven by many factors; government regulation being an important one. For this reason, the U.S. government should ensure that LNG export project regulatory certification and permits be reviewed and permitted consistently and transparently to allow the market to direct capital to construct facilities, which can provide relief to U.S., European, and global natural gas, and eventually related product prices. This is a long-term solution.

Natural gas infrastructure that supports LNG exports (needed for moving natural gas from production areas to tidewater) is also a critical link in the LNG value chain. This infrastructure is a constraint to increasing production in some basins. This infrastructure includes incremental natural gas production, gathering, compression, and pipeline transportation and storage. Addressing the permitting and related regulatory processes across federal, state, and local governments to ensure timely infrastructure development is anticipated to be a critical path item for increasing natural gas supply for domestic use and export. The NPC completed a comprehensive report on oil and natural gas infrastructure in 2019. An action item for the 120-day report will be to identify key areas (either value chain or geographic) of oil and natural gas infrastructure, which if resolved, could address constraints to increasing refined product and natural gas supply. The lead-time for the development of new projects is many years but maximizing the existing system of exports would be the primary focus of this review.

## **Explore Options to Increase Further the Utilization of Spare Refining Capacity in China and Reduce Emissions Costs in Europe**

While there has been some increase recently, the export quotas for fuels in China have resulted in under-utilization of the refining capacity despite the strong market signals. Increases in these quotas would likely help increase the supplies of petroleum products and hence ease price pressures.

The Emissions Trading Scheme in Europe impacts the cost of running refineries in Europe. As European supply is required to supply the world markets, these costs are impacting global product prices. Temporarily reducing or removing these costs would reduce the cost of petroleum products across the world, including in the United States.

### **EMERGENCY RESPONSE PREPAREDNESS**

One of the key questions included in the request from the Secretary of Energy was what steps should be taken to help response to disruptions such as hurricanes, cyber-attacks, etc.

Disruption in energy supply can take various forms, from lack of feedstock to industrial facilities (crude oil to refineries, natural gas to power plants) to interruption of utilities preventing shipment/delivery of energy, to weather, accidents, or intentional acts disabling key infrastructure. The ability of government and industry to jointly respond in an efficient manner will determine how widespread a disruption is and how long a disruption lasts.

The Emergency Preparedness work group (EPWG) has been set up to address what steps should be taken to enhance response to disruptions in the energy supply. The work group is reviewing the 2014 Enhancing Emergency Preparedness for Natural Disasters and 2016 Emergency Preparedness for Natural Disasters NPC studies. Since the publications of the 2014/2016 studies, much has been accomplished toward the recommendations.

When the Department of Energy (DOE) established the Office of Cybersecurity, Energy Security, and Emergency Response (CESER) in 2018, a heightened focus was brought to understanding and preparing for emerging threats and risks to the energy sector. Recommendations from the 2014/2016 studies were utilized along with partnerships from the Oil and Natural Subsector Coordinating Council and Electricity Subsector Coordinating Council, to help align CESER with preparedness activities needed to carry out the agency's federally mandated response requirements.

After a year without a dedicated program manager focused on preparedness exercises, CESER hired in 2018 a seasoned program manager to lead training and exercise activities and further engage the sector and cross-sector partners in improving preparedness. This expertise has helped transform CESER's engagement across industry and has improved understanding of the Oil and Natural Gas value chains throughout the community. These exercises, such as the enhancements to CESER's annual all-hazards Clear Path Exercise, have also contributed to increased coordination and has leveled expectations during real world incident responses.

CESER's response staff implemented elements of the National Incident Management System's (NIMS) Incident Command System (ICS) into its organization and its real-world incident response functions. The Emergency Support Function (ESF) 12 – Energy role evolved following several busy years

of activations for exercises, severe storms, and the COVID-19 pandemic. The response program used these opportunities to validate the evolved response model and build positive rapport with the public sector partners as well as other government entities.

Trade associations, representing company owner and operators, provided liaisons, building relationships with, and emphasizing direct communications with CESER's Response and Restoration division. Relationship building and expectation development with the Response and Restoration division as well as the Energy Information Administration (EIA) contributed to increased situational awareness and positive Unity of Effort coordination calls during exercises and real-world incidents.

An area that requires additional improvement includes the partnership building between states and the oil and natural gas industry, specifically relating to energy assurance (security) planning. Increased awareness at the state level regarding the complexities of the oil and natural gas value chains, would support state energy preparedness and policy development and implementation. However, many of the recommendations made in the 2014/2016 studies have seen significant progress and are meant to be actions that are continuously improved upon, in collaboration between CESER and the sector partners.

For the final report, the EPWG will further assess the 2014/2016 study recommendations and provide detailed feedback about the progress of each and areas where additional improvement may strengthen the agency's position in preparedness and response.

The EPWG will also review the scenarios considered in the 2014 and 2016 studies and assess whether new threats exist that deserve additional analysis. New threats might include previously unseen weather events like the 2021 Winter Storm Uri. After identification of these new threats, the team will determine if existing emergency response strategies are sufficient or if additional work is needed.

Energy infrastructure can allow supply to be rapidly restored following a disruption. This can be effective only if the infrastructure is available to operate and has enough capacity to "make up" for the original loss. A sizable amount of new infrastructure has been installed since the 2014 and 2016 studies. The team will review recent additions to the energy infrastructure by U.S. PADD regions to assess potential changes in capacity and redundancy to various disruption scenarios. This includes crude oil pipelines, natural gas transmission lines, propane infrastructure, and refined product infrastructure. If a given piece of infrastructure is responsible for a minor portion of the regional supply or transmission capacity, it is likely that short-term alternatives, including drawing down inventories or conservation, can help bridge the disruption. On the other hand, if one facility or one pipeline can result in a significant regional impact, further review and planning might be warranted to develop mitigating strategies for a potential disruption. The 2021 Colonial Pipeline disruption from a cyber event is an example of a large piece of infrastructure causing a significant regional impact.

Finally, the EPWG will review potential enhancements to existing emergency response frameworks. The contributions of the Oil and Natural Gas Subsector Coordinating Council (ONG-SCC), the Oil and Natural Gas Information Sharing & Analysis Center (ONG-ISAC), and the Downstream Natural Gas Information Sharing & Analysis Center (DNG-ISAC) will be reviewed through an emergency preparedness lens along with existing state energy assurance or energy security plans. Coordination of work and clear roles and responsibilities will be assessed for improvement opportunities. The EPWG will

also benchmark with the Electricity Subsector Coordinating Council (ESCC) for learnings that could be applied to this study scope. Opportunities will be identified for potential review and application in the future.

The full set of recommendations will be included in the final report.

For reference, the key findings and recommendations from the 2014 and 2016 NPC studies were as follows.

- 1. Guiding principles in restoring energy system to steady state operations following disruption
  - a. Responses to supply chain emergencies are best managed when there is advance planning, preparedness, and private- and public-sector collaboration.
  - b. Collaboration and coordination of activities are enabled through adhering to the established common frameworks and management systems.
  - c. Allowing markets to function normally provides for the quickest and most efficient restoration of supply to impacted areas.
  - d. Industry must conduct its operations in compliance with the law.
  - e. Industry is responsible for restoring oil and gas supply.
  - f. Priority for electricity restoration should be on critical infrastructure.
  - g. Supply chain interdependencies across segments/regions should be recognized.
  - h. Regulatory barriers to restoring supply should be removed through government-issued temporary regulatory relief, where possible.

### 2. Findings

- a. It is critically important for government emergency response organizations to have a baseline understanding of the dynamic nature of the oil and gas supply chains.
- b. Improved situational awareness about the status of oil and gas infrastructure and service disruptions from industry would enable DOE and other government agencies to more-effectively respond.
- c. A major challenge during emergency response is effective communication between and within federal and state agencies and with industry.
- d. The maintenance of trained, knowledgeable response organization within government agencies should be a priority along with a process to sustain it.
- e. Within industry and across all levels of government, leadership commitment and funding are required to continuously improve and ensure a state of readiness to respond to supply chain disruptions.

### 3. Recommendations

- a. Harmonize DOE's energy response team structure with the NIMS Incident Command System (ICS)
- b. Leverage EIA's subject matter expertise within DOE's energy response team to improve supply chain situation assessments.
- c. Establish company liaisons and direct communication with DOE's energy response team to improve situation assessments.
- d. Streamline and enhance processes for obtaining temporary regulatory relief to speed up recovery.
- e. States should increase engagement with the oil and natural gas industry in their energy assurance plans, and industry members should assist states in such efforts.

- f. Both DOE and states should establish routine education and training programs for key government emergency response positions.
- g. Both DOE and states should improve their comprehensive drill and exercise programs and include industry participation. Reciprocal invitations extended by companies to DOE and states are recommended.

### **KEY ITEMS TO ADDRESS IN THE FINAL REPORT**

The final (120-day) report will include:

- 1. An update of the supply/demand fundamentals and market conditions
- 2. Finalization of the recommendations and considerations to increase supply of refined products
- 3. The assessment of the effectiveness of the implementation of the recommendations from the 2014/2016 NPC emergency preparedness study and any new recommendations.

In addition, as per the request from Secretary Granholm, the final report will include:

- 4. An analysis of the changing global crude supply and impact on U.S.-based producers, suppliers, and refiners. The report will examine changes that are occurring in the global supply of crude, including the impacts of the Russian invasion of Ukraine as well as the impacts of sanctions. It will identify potential supply challenges in the near and medium term that should be evaluated further.
- 5. An assessment of the steps being taken and recommendations for the principles to help ensure a manageable transition towards a net-zero economy. This will include a summary of the different technologies being implemented and their readiness and potential pace of scale up and deployment. It will also include the principles to help ensure the transition is manageable, which will include, but not be limited to:
  - The recognition that through the transition all forms of energy will be needed
  - Focusing policies on eliminating emissions vs eliminating sources of energy
  - Ensuring policies are technology neutral and enable the market to function in encouraging technology development and deployment
  - The need for predictable fiscal regimes to allow development of and investment in both existing and new sources of energy.



### The Secretary of Energy Washington, DC 20585

July 29, 2022

Mr. Darren W. Woods Chair, National Petroleum Council Chairman and Chief Executive Officer Exxon Mobil Corporation 5659 Las Colinas Boulevard Irving, Texas 75039

Dear Mr. Woods:

Thank you for arranging an administrative meeting with the National Petroleum Council (NPC) at my request on July 1. In this meeting I shared my deep concern over the current crude oil and refined products supply and demand imbalance caused by multiple factors, underscoring the outsized impact from the unprecedented invasion of Ukraine. This imbalance continues to create upward pressure on oil prices, resulting in significant financial pain at the pump for the American people. President Biden is committed to alleviating this burden and taking steps to shore up supply, including calling on industry to increase private inventories to protect the American people. I appreciated your perspectives on how the NPC could help provide expert recommendation and analysis to help prepare and address this ongoing challenge.

As we focus on increasing the financial pressure on Vladimir Putin, we are dually focused on mitigating the negative impacts on the domestic economy. We recognize that U.S. refiners, producers, and the full supply chain are experiencing constraints, and as we look at the situation comprehensively, I informed you of the following areas that I am interested in receiving formal advice:

- How can we increase supply? Where is there efficiency and/or opportunity to increase current supplies of crude oil and refined products?
- What are current constraints and market hurdles to getting affordable products to U.S. consumers?
- How are companies reevaluating traditional emergency preparedness? Given the current tight market, how is industry making sure inventories are well supplied should there be a critical disruption from major and/or multiple storms, a cyberattack, or other unforeseen events that would cause refineries or pipelines to shut down? What additional actions can the government be taking in coordination with industry to help enhance preparedness?
- Where is industry taking steps and grasping opportunities to prepare for a net-zero economy? Right now, we are seeing impacts from an unmanaged transition.

What actions are being taken by industry to move to a more managed energy transition? What actions can the government take to support a more managed transition?

### I request the NPC to:

- 1. Provide within 30 days a written list of: (i) the ways industry is preparing to secure consistent, physical supply for the American people; and (2) near-term actionable steps the Administration can consider to help increase physical supply of oil and refined products while continuing safe, efficient operations and maintenance of production facilities.
- 2. Conduct analysis and issue a report within 120 days examining and providing an analysis of the changing global crude supply and how it will positively and/or negatively impact U.S.-based producers, suppliers and refiners; note expected supply challenges in the near term and medium term that should be evaluated further; and provide an update on ongoing work related to the steps the industry is taking to be an active player in a net-zero economy by 2050.

For the purposes of the study, I am designating Deputy Secretary David Turk as the official to whom the NPC reports and to represent me at NPC meetings. The Assistant Secretary for Fossil Energy and Carbon Management, Brad Crabtree, will work with Deputy Secretary Turk to provide the NPC with the information it needs to expedite the analysis and advice from the NPC.

In order to receive advice from the NPC in a time frame that will allow for consideration and action, I appreciate your written response to the near-term recommendations, and I will request the convening of a full NPC meeting following the 120 days to brief me on the results of this study.

Sincerely

Jennifer Granholm

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### EVOLVING MARKETS AND TRANSITION TO NET-ZERO SUBGROUP

Atul Arya Senior Vice President and Chief Energy Strategist S&P Global Commodity Insights

### **SECRETARY**

Marshall W. Nichols Executive Director National Petroleum Council From: Meghan Thacker
To: Turk, David

Subject: [EXTERNAL] FW: WSTN Letter re: NGO opposition to "excessive exports" of LNG

Date: Friday, July 29, 2022 4:42:34 PM

Attachments: WSTN Letter to DOE Secretary Granholm-July 28 2022 (00000006).pdf

### Deputy Secretary,

I wanted to make sure you saw the attached letter transmitted to the Secretary yesterday. You can see further background below.

Please do not hesitate to reach out for additional information as needed!

### -Meghan

From: Meghan Thacker

Sent: Friday, July 29, 2022 3:40 PM

To (hq.doe.gov' DOE Equities (hq.doe.gov)

Subject: WSTN Letter re: NGO opposition to "excessive exports" of LNG

Madame Secretary,

I represent the <u>Western States and Tribal Nations Natural Gas Initiative</u>, a formal third party organization of representatives from the states of Colorado, Utah, Wyoming, and New Mexico along with the Ute Indian Tribe, the Southern Ute Indian Tribe, Jacarilla-Apache Nation, and Missouri River Resources, associated with MHA Nation. The state of Baja California, Mexico is also a founding signatory to the organizational MOU. The initiative was formed to foster economic development in the rural communities of Western States, promote tribal self-determination and improve the environment by eliminating natural gas flaring and making cleaner fuels available to Asian energy markets.

WSTN has been tracking the ensuing opposition to LNG exports and the states and tribal nations wanted to be sure you were aware of the problems associated with any actions to limit "excessive exports" of LNG from their perspective.

We would appreciate your review of the attached letter and please do not hesitate to contact us for more information.

Sincerely,

Meghan Marino Thacker

Meghan M. Thacker Vice President, Federal and State Affairs

**HBW Resources LLC** 

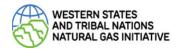
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July 28, 2022

The Honorable
Jennifer Granholm
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, D.C. 20585

### Re: Proposals to Limit LNG Exports

Dear Secretary Granholm,

I am writing to you as President of the <u>Western States and Tribal Nations Natural Gas Initiative</u> (WSTN) to highlight the negative impact that limiting LNG exports would have on western and tribal economic development, America's mission to reduce harmful greenhouse gas emissions globally and our geopolitical strength and ability to support our European allies amid an historic moment of conflict between Russia and Ukraine.

WSTN is a bipartisan, trans-national initiative led by sovereign tribal nations, states and counties focused on creating rural economic development, advancing tribal self-determination and reducing global emissions through the export of clean natural gas from western North America to international markets. It is now an established 501(c)4 organized under a Memorandum of Understanding between sovereign tribal, state, and county governments including:

- The Ute Indian Tribe
- The State of Utah (Utah Governor's Office of Energy Development)
- The State of Wyoming (Wyoming Energy Authority)
- The State of Baja California, Mexico (Ministry of Tourism and Economic Development)
- The State of New Mexico (Energy, Minerals and Natural Resource Department)
- The Western Colorado counties of Garfield, Mesa, Moffat and Rio Blanco
- The Southern Ute Indian Tribe

WSTN is concerned that certain organizations are once again suggesting that a ban on "excessive exports" of LNG should be enacted in the name of protecting consumers. Unfortunately, this proposal is ill-conceived, will have little to no effect on consumer prices and, critically, will leave our European allies in the literal cold as winter approaches and the Ukraine-Russia conflict persists.

It will also weaken American energy security and the geopolitical leverage it affords us by disincentivizing domestic production, which should be left to respond to the strong market signals now driving our record LNG export trade. Our energy supply is currently adequate to meet domestic demand and the unexpected demand from our European allies, whose own energy security has been harmed by the fallout from the conflict in Ukraine. It bears remembering that many of the LNG cargoes which were diverted to Europe were at first headed toward markets in Asia, which is expected to drive global LNG demand growth in the coming decades.



To meet this growing demand and protect our future energy security – as well as that of our allies – we must have full flexibility to produce in line with market expectations. Any ban would harm our ability to meet demand efficiently and rapidly through increased production, which would deprive our tribal and state communities of the concomitant economic development benefits.

This request to ban "excessive exports" is also faulty in its formulation, because what one group views as "excessive" is highly subjective. Such a subjective factor would negatively affect future production investment decisions and should be rejected. In WSTN's view, the best solution for high energy prices is high energy prices, which create the natural incentive to produce more gas and the opportunity to lock in long-term contracts at a higher price. However, greater production will equalize the supply-demand balance and bring down prices over the near and medium terms.

The United States has the gas it needs to meet this demand for domestic and international markets, as well as help other nations switch from higher-emitting fuels to natural gas. That substitution of fuels which brings down overall global emissions – a fact that even Europe's Green parties have recognized given the exigencies created by the war in Ukraine.

Rockies producers are moving toward more sustainable, responsibly source natural gas, and are coming into business alignment with major LNG players as they as they transform to lower-carbon players with a focus on bio-gas and clean hydrogen for domestic use and international export.

These advancements would have an immediate and significant impact in reducing emissions domestically and in Asian countries through U.S. exports of LNG and eventually, decarbonized ammonia and hydrogen.

However, proposals to limit LNG exports to surplus supplies of natural gas would choke off investments being contemplated now that will lead to the infrastructure and production necessary for decarbonized ammonia and hydrogen.

Our future in exporting America's emissions reduction success by providing LNG to supplant coal-fired power generation is bright. We now have the largest LNG export capacity in the world, according to the Energy Information Administration.

We urge you to reject calls for an export ban, which would limit western and tribal economic development, harm consumers by artificially decreasing the natural gas supply in an environment of high global demand, and stifle the investments needed to build toward an increasingly cleaner natural gas industry and a successful decarbonized hydrogen industry

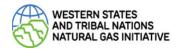
Sincerely,

Andrew Browning

President

Western States and Tribal Nations

a Brown



Cc: Senator Martin Heinrich

Senator Ben Ray Lujan

Senator Kyrsten Sinema

Senator Mark Kelly

Senator John Hickenlooper

Senator Michael Bennet

Senator Mitt Romney

Senator Michael Lee

Senator John Barrasso

Senator Cynthia Lummis

From: Bradbury, Anne To: Turk, David

[EXTERNAL] RE: New Analysis: US Crude Oil Exports Are Reducing Costs for Americans Subject:

Date: Thursday, July 28, 2022 3:27:30 PM

Attachments: image001.png

image002.png

You are very welcome. Please let us know if you have questions or if we can ever be of assistance.

**From:** Turk, David <david.turk@hq.doe.gov> **Sent:** Tuesday, July 26, 2022 11:10 PM

**To:** Bradbury, Anne <anne.bradbury@axpc.org>

Cc: Liz Bowman < lbowman@axpc.org>

Subject: Re: New Analysis: US Crude Oil Exports Are Reducing Costs for Americans

Thx for sharing

**From:** Bradbury, Anne <anne.bradbury@axpc.org>

**Sent:** Tuesday, July 26, 2022 11:41 AM **To:** Turk, David <<u>david.turk@hq.doe.gov</u>> Cc: Liz Bowman < <a href="mailto:lbowman@axpc.org">lbowman@axpc.org</a>>

Subject: [EXTERNAL] New Analysis: US Crude Oil Exports Are Reducing Costs for Americans

Good morning, David – Below, please find a news release that AXPC and API jointly sent this morning with the results of a new independent analysis around the benefits Americans received following the bipartisan decision to lift the crude export ban in 2015, including lower gasoline prices. Please also note the fact sheet and detailed analysis, which are linked in the release (and attached to this email).

The ICF study below comes one week after a separate study from the American Council for Capital Formation, which detailed the potentially negative impacts of any new policy prohibiting the export of refined products. If you have any questions or if we can be of any assistance, please let us know. Thank you – Anne Bradbury, AXPC CEO



For Immediate Release

Contact: Liz Bowman, <a href="mailto:lbowman@axpc.org">lbowman@axpc.org</a>

New Analysis: US Crude Oil Exports Are Reducing Costs for Americans

WASHINGTON – July 26, 2022 – The American Exploration and Production Council (AXPC) and the American Petroleum Institute (API) today released new analysis

demonstrating the significant and growing economic benefits of America's abundant crude oil resources for both domestic use and global export. The study, conducted by ICF International, analyzed the six-year period since a bipartisan Congressional majority lifted a ban on exporting US crude oil in December 2015.

The study found that enabling open markets increased oil and natural gas development in America, which reduced global oil prices by \$1.93 per barrel over the six-year period; added \$161 billion to US GDP; and added nearly 50,000 jobs.

"As this analysis shows, lifting the ban on crude exports in 2015 saved Americans money at the pump, supported thousands of good-paying American jobs, and reduced our country's dependence on foreign oil. At a time when Americans are hurting from the price at the pump, it's clear that increasing the global supply of crude oil is critical to lower energy prices here at home and greater energy security around the globe," said AXPC CEO Anne Bradbury.

"American energy leadership doesn't just deliver significant benefits to Americans - fueling the US economy and American jobs, delivering reliable energy, and helping put downward pressure on prices, but it also strengthens global security and supports our allies," **said API President and CEO Mike Sommers.** "US energy exports provides critical stability to the global market, supports our allies across the world who depend on American energy to meet their needs, and strengthens American energy security here at home. If the US is not exporting energy, it leaves the door open for unstable nations or those with less stringent environmental standards to fill the void and reap the benefits."

The new study analyzes the changes that have occurred in US oil and natural gas markets since Congress enabled crude oil exports compared to a hypothetical scenario where US oil exports remained in place. The study found that lifting the ban on US crude oil exports has:

- Decreased US Consumer Expenditures on Refined Products and Natural Gas by \$92 billion: Higher US oil production expanded global oil supply, reducing global crude oil and refined product prices. Because there is free trade in petroleum products, US fuel consumers have benefited from these lower product prices
- Increased US GDP by \$161 billion: The benefits of lower fuel costs for US consumers and higher revenues for US oil producers (due to higher output and higher domestic crude prices) outweighed revenue losses for US refiners, resulting in a net benefit to US GDP.
- Improved the US Trade Balance by \$178 billion: Higher US exports have improved the US trade balance, reducing the US trade deficit by a measurable amount.
- Increased US Employment by an average of 48,000 jobs: Lifting the crude export ban has increased employment in the Upstream oil & gas sector, including derrick operators, first-line supervisors and managers, rotary drill operators, roustabouts, and service unit operators, and created direct, indirect, and induced jobs.

• Increased US Crude Oil Production by 1.8 billion barrels: Allowing US domestic oil prices to converge with international benchmarks, spurred more drilling activity leading to higher crude oil production, as well as higher production of associated natural gas and NGLs that come from oil wells.

### Click here for more information on the ICF analysis.

### **About the American Exploration and Production Council:**

AXPC is a national trade association representing the largest independent oil and natural gas exploration and production companies in the United States. We lead the world in the cleanest and safest onshore production of oil and gas, while supporting millions of Americans in high-paying jobs and investing a wealth of resources in our communities. Learn more at <a href="https://www.axpc.org/">https://www.axpc.org/</a>

**API** represents all segments of America's natural gas and oil industry, which supports more than 11 million US jobs and is backed by a growing grassroots movement of millions of Americans. Our approximately 600 members produce, process and distribute the majority of the nation's energy, and participate in API Energy Excellence®, which is accelerating environmental and safety progress by fostering new technologies and transparent reporting. API was formed in 1919 as a standardssetting organization and has developed more than 800 standards to enhance operational and environmental safety, efficiency, and sustainability.

###

### **Anne Bradbury**

CEO
999 E Street NW, Suite 200
Washington, DC 20004
Office: (b) (6)
Mobile

AMERICAN
EXPLORATION
& PRODUCTION
COUNCIL

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From: Bartol, Bridget
To: Davis, Christopher
Cc: Ho, Christiana

Subject: RE: Gunvor SA Jones Act Waiver Request
Date: Wednesday, June 22, 2022 8:07:30 PM

Attachments: image001.png

Ok, Christiana, perhaps I can connect with her early in the morning? (b) (5)

Thanks!

### **Bridget Bartol**

Deputy Chief of Staff

U.S. Department of Energy

Bridget.Bartol@hq.doe.gov | (b) (6)

Pronouns: She/her/hers

From: Davis, Christopher <christopher.davis@hq.doe.gov>

Sent: Wednesday, June 22, 2022 8:06 PM

To: Bartol, Bridget <bri>c: Bartol, Bridget <br/>
Cc: Ho, Christiana <christiana.ho@hq.doe.gov><br/>
Subject: RE: Gunvor SA Jones Act Waiver Request

(b)(5)

+Chirstiana

(b)(5)

From: Bartol, Bridget < bridget.bartol@hq.doe.gov >

Sent: Wednesday, June 22, 2022 7:26 PM

**To:** Davis, Christopher < <a href="mailto:christopher.davis@hq.doe.gov">christopher.davis@hq.doe.gov</a> <a href="mailto:Subject">Subject</a>: FW: Gunvor SA Jones Act Waiver Request

FYSA - (b) (5)

### **Bridget Bartol**

Deputy Chief of Staff

U.S. Department of Energy

Bridget.Bartol@hq.doe.gov | (b) (6)

Pronouns: She/her/hers

From: Tarduogno, Matthew <matthew.tarduogno@hq.doe.gov>

**Sent:** Wednesday, June 22, 2022 6:21 PM

To: Speiser, Tertia < tertia.speiser@hq.doe.gov >; Konieczny, Katherine (Kathy)

<a href="mailto:konieczny@hq.doe.gov">katherine.konieczny@hq.doe.gov">katherine.konieczny@hq.doe.gov</a>; Vaidyanathan, Kavita <a href="mailto:kavita.vaidyanathan@hq.doe.gov">kavita.vaidyanathan@hq.doe.gov</a>; Powell, John <a href="mailto:john.powell@hq.doe.gov">john.powell@hq.doe.gov</a>; Westfall, Lynn (EIA) <a href="mailto:kavita.vaidyanathan@hq.doe.gov">kavita.vaidyanathan@hq.doe.gov</a>; Bartol,

Bridget <bri>bartol@hq.doe.gov>; Wills, Andrew C <andrew.wills@hq.doe.gov>; Frisch, Carla

<arrange | <arrange | Carla.frisch@hq.doe.gov | Nerurkar, Neelesh | <a href="mailto:neelesh.nerurkar@hq.doe.gov">neelesh.nerurkar@hq.doe.gov</a> | Nerurkar, Neelesh.nerurkar@hq.doe.gov</a> | Nerurkar, Neelesh.nerurkar@hq.doe.gov</a> | Nerurkar, Neelesh.nerurkar@hq.doe.gov</a> | Nerurkar, Neelesh.nerurkar@hq.doe.gov</a> | Nerurkar@hq.doe.gov</a> | Nerurkar@hq.doe.

**Cc:** Kumar, Puesh < <u>puesh.kumar@hq.doe.gov</u>> **Subject:** Re: Gunvor SA Jones Act Waiver Request

All,

Apparently first link I sent was just for the template. Please reference this version.

OUO Draft DOE Response to Jones Act Request 06222022 1.doc

-Matt

From: Tarduogno, Matthew

Sent: Wednesday, June 22, 2022 5:59:19 PM

To: Speiser, Tertia < tertia.speiser@hq.doe.gov >; Konieczny, Katherine (Kathy)

<<u>Katherine.Konieczny@Hq.Doe.Gov</u>>; Vaidyanathan, Kavita <<u>Kavita.Vaidyanathan@Hq.Doe.Gov</u>>; Powell, John <<u>John.Powell@hq.doe.gov</u>>; Westfall, Lynn (EIA) <<u>lynn.westfall@eia.gov</u>>; Bartol, Bridget <<u>bridget.bartol@hq.doe.gov</u>>; Wills, Andrew C <<u>andrew.wills@hq.doe.gov</u>>; Frisch, Carla

<arla.frisch@hq.doe.gov>; Nerurkar, Neelesh <neelesh.nerurkar@hq.doe.gov>

**Cc:** Kumar, Puesh < <u>puesh.kumar@hq.doe.gov</u>> **Subject:** RE: Gunvor SA Jones Act Waiver Request

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All,

(b)(5)

(b)(5)

I tried to follow the template that we have, but had to modify a bit.

OUO Draft DOE Response to Jones Act Request 06222022.doc

I will email a copy to Lynn as well.

Best Regards,

From: Preciado, James

To: Nerurkar, Neelesh; Westfall, Lynn (EIA); Tarduogno, Matthew; Macintyre, Douglas

Cc: <u>Bartol, Bridget</u>
Subject: RE: Jones act question

Date: Tuesday, June 14, 2022 2:38:06 PM

Attachments: <u>image001.png</u>

There is this article from earlier this month.

https://gcaptain.com/surging-tanker-rates-make-interesting-case-for-jones-act-fleet/

James Preciado

U.S. Energy Information Administration

202-586-8769

From: Preciado, James

Sent: Tuesday, June 14, 2022 2:37 PM

To: Nerurkar, Neelesh <neelesh.nerurkar@hq.doe.gov>; Westfall, Lynn <Lynn.Westfall@eia.gov>;

Tarduogno, Matthew (HQ) <matthew.tarduogno@hq.doe.gov>; Macintyre, Douglas (HQ)

<douglas.macintyre@hq.doe.gov>

Cc: Bartol, Bridget (HQ) <bridget.bartol@hq.doe.gov>

Subject: RE: Jones act question

Neelesh,

### (b)(5)

James Preciado

U.S. Energy Information Administration

202-586-8769

From: Nerurkar, Neelesh [mailto:neelesh.nerurkar@hq.doe.gov]

Sent: Tuesday, June 14, 2022 2:35 PM

To: Preciado, James < James. Preciado@eia.gov >; Westfall, Lynn < Lynn. Westfall@eia.gov >; Tarduogno,

Matthew (HQ) < matthew.tarduogno@hq.doe.gov >; Macintyre, Douglas (HQ)

<a href="mailto:douglas.macintyre@hq.doe.gov">douglas.macintyre@hq.doe.gov</a>>

Cc: Bartol, Bridget (HQ) < bridget.bartol@hq.doe.gov>

Subject: RE: Jones act question

Thanks! Rebecca came back with something similar.

(b)(5)

From: Preciado, James < James. Preciado@eia.gov>

**Sent:** Tuesday, June 14, 2022 2:15 PM

**To:** Nerurkar, Neelesh <<u>neelesh.nerurkar@hq.doe.gov</u>>; Westfall, Lynn (EIA) <<u>lynn.westfall@eia.gov</u>>; Tarduogno, Matthew <<u>matthew.tarduogno@hq.doe.gov</u>>; Macintyre, Douglas <<u>douglas.macintyre@hq.doe.gov</u>>

**Cc:** Bartol, Bridget < bridget.bartol@hq.doe.gov>

Subject: RE: Jones act question

Neelesh,

Yes, (b) (5)

James Preciado
U.S. Energy Information Administration

202-586-8769

**From:** Nerurkar, Neelesh [mailto:neelesh.nerurkar@hq.doe.gov]

**Sent:** Tuesday, June 14, 2022 9:51 AM

**To:** Preciado, James < <u>James.Preciado@eia.gov</u>>; Westfall, Lynn < <u>Lynn.Westfall@eia.gov</u>>; Tarduogno, Matthew (HQ) < <u>matthew.tarduogno@hq.doe.gov</u>>; Macintyre, Douglas (HQ) < <u>douglas.macintyre@hq.doe.gov</u>>

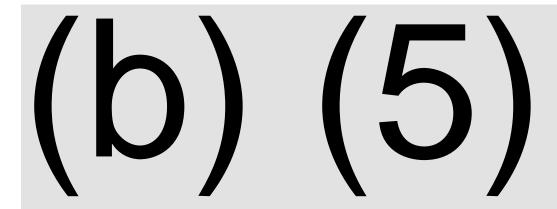
Cc: Bartol, Bridget (HQ) < bridget.bartol@hq.doe.gov>

Subject: Jones act question

Question: Do you

(b) (5)

Context: (b) (5)



Any additional thoughts welcome on this issue. Feel free to call me for more details.

Any information before 4pm is particularly useful as I have to speak with NEC then.

Thanks, Neelesh From: Bartol, Bridget

To: Nerurkar, Neelesh; Macintyre, Douglas; Konieczny, Katherine (Kathy)

Subject: RE: Flags?

Date: Monday, June 13, 2022 7:13:50 PM

Thanks! We can get back to them with more details I'll just close the loop on what we have for tonight.

### **Bridget Bartol**

Deputy Chief of Staff

U.S. Department of Energy

Bridget.Bartol@hq.doe.gov | 240-268-4214

Pronouns: She/her/hers

From: Nerurkar, Neelesh < neelesh.nerurkar@hq.doe.gov>

Sent: Monday, June 13, 2022 7:00 PM

To: Macintyre, Douglas <douglas.macintyre@hq.doe.gov>; Bartol, Bridget

<bri>dget.bartol@hq.doe.gov>; Konieczny, Katherine (Kathy) <katherine.konieczny@hq.doe.gov>

Subject: RE: Flags?

Bridget – I need to get back to you tomorrow. See my comments in yellow highlights below.

Kathy – Can would you have some time to discuss in the morning?

The other questions I need to touch base with EIA or (b) (5)

From: Macintyre, Douglas < douglas.macintyre@hq.doe.gov>

Sent: Monday, June 13, 2022 6:03 PM

To: Bartol, Bridget < bridget.bartol@hq.doe.gov>; Nerurkar, Neelesh

<neelesh.nerurkar@hq.doe.gov>; Konieczny, Katherine (Kathy) <katherine.konieczny@hq.doe.gov>

Subject: RE: Flags?

Looks good to me once you

(b) (5)

Doug

P.S. I will never get the 30+ years of EIA attention to small details out of me. Sorry!

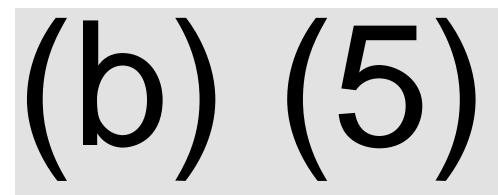
From: Bartol, Bridget < bridget.bartol@hq.doe.gov >

Sent: Monday, June 13, 2022 5:56 PM

To: Macintyre, Douglas < douglas.macintyre@hq.doe.gov >; Nerurkar, Neelesh

<neelesh.nerurkar@hq.doe.gov>; Konieczny, Katherine (Kathy) <katherine.konieczny@hq.doe.gov>

Subject: Flags?



### **Bridget Bartol**

Deputy Chief of Staff
U.S. Department of Energy
<a href="mailto:Bridget.Bartol@hq.doe.gov">Bridget.Bartol@hq.doe.gov</a> | (b) (6)

Pronouns: She/her/hers

From: Wood, Alex

To: <u>Bartol, Bridget; Davis, Christopher</u>

Cc: Light, Andrew; Cerqueira, Julie; George, Rebecca; Gunasekara, Shiyana; Degen, Gregory

Subject: RE: Energy market analysis - S1

Date: Wednesday, June 1, 2022 5:28:57 PM

Attachments: 2022-06-01 (b) (5) Impacts.docx

Bridget,

In response to yesterday's request we have prepared the attached analysis examining the market impacts of **(b) (5)**.

Thanks,

Alex Wood

Director, International Economic Opportunity Office of International Affairs U.S. Department of Energy

+1-202-586-3537

From: Bartol, Bridget <bri>bridget.bartol@hq.doe.gov>

Sent: Tuesday, May 31, 2022 6:45 PM

**To:** Light, Andrew < andrew.light@hq.doe.gov>; Cerqueira, Julie < iulie.cerqueira@hq.doe.gov>;

Degen, Gregory < gregory.degen@hq.doe.gov>

Cc: Davis, Christopher < <a href="mailto:christopher.davis@hq.doe.gov">christopher.davis@hq.doe.gov</a>

Subject: Re: Energy market analysis - S1

Hello,

Circling back. (b) (5)

Thanks! Bridget

From: Bartol, Bridget

Sent: Tuesday, May 31, 2022 1:04:36 PM

To: Light, Andrew <andrew.light@hq.doe.gov>; Cerqueira, Julie <iulie.cerqueira@hq.doe.gov>;

Degen, Gregory < gregory.degen@hq.doe.gov>

Cc: Davis, Christopher < <a href="mailto:christopher.davis@hq.doe.gov">christopher.davis@hq.doe.gov</a>

Subject: FW: Energy market analysis - S1

Hello all,

See exchange below with EIA. (b) (5)

### Area of interest: (b) (5)

### **Bridget Bartol**

Deputy Chief of Staff U.S. Department of Energy

Bridget.Bartol@hq.doe.gov |(b) (6)

Pronouns: She/her/hers

From: Nalley, Stephen < <a href="mailto:Stephen.Nalley@eia.gov">Stephen.Nalley@eia.gov</a>>

**Sent:** Tuesday, May 31, 2022 12:59 PM

To: Bartol, Bridget < bridget.bartol@hq.doe.gov >; Davis, Christopher

<<u>christopher.davis@hq.doe.gov</u>>; DeCarolis, Joe F. (EIA) <<u>ioe.decarolis@eia.gov</u>>

Cc: Ho, Christiana < <a href="mailto:christiana.ho@hq.doe.gov">christiana.ho@hq.doe.gov</a>; LaRose, Angelina (EIA) < <a href="mailto:angelina.larose@eia.gov">angelina.larose@eia.gov</a>

**Subject:** RE: Energy market analysis - S1

### + Angelina LaRose

We're pulling together what we have for the two questions below. I'll send that along just as soon as its ready.

As you mentioned, the June STEO will be published next Tuesday and our analysts are sorting through the (b) (5) made over the weekend as they prepare the STEO. (b) (5)

I think looping in IA makes sense and of course we are happy to participate in a call if that would be helpful.

### Steve

Stephen Nalley | Deputy Administrator U.S. Energy Information Administration <a href="mailto:stephen.nalley@eia.gov">stephen.nalley@eia.gov</a> | 202.586.0959

**From:** Bartol, Bridget [mailto:bridget.bartol@hq.doe.gov]

**Sent:** Tuesday, May 31, 2022 10:22 AM

**To:** Davis, Christopher (HQ) < christopher.davis@hq.doe.gov>; DeCarolis, Joe F.

<<u>Joe.DeCarolis@eia.gov</u>>; Nalley, Stephen <<u>Stephen.Nalley@eia.gov</u>>

**Cc:** Ho, Christiana (HQ) < <a href="mailto:christiana.ho@hq.doe.gov">christiana.ho@hq.doe.gov</a>>

**Subject:** RE: Energy market analysis - S1

(b) (5)

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•

### **Bridget Bartol**

Deputy Chief of Staff

U.S. Department of Energy

Bridget.Bartol@hq.doe.gov | (b) (6)

Pronouns: She/her/hers

**From:** Davis, Christopher < <a href="mailto:christopher.davis@hq.doe.gov">christopher.davis@hq.doe.gov</a>>

**Sent:** Tuesday, May 31, 2022 9:47 AM

**To:** Bartol, Bridget < bridget.bartol@hq.doe.gov >; DeCarolis, Joe F. (EIA) < ioe.decarolis@eia.gov >;

Nalley, Stephen (EIA) <<u>stephen.nalley@eia.gov</u>> **Cc:** Ho, Christiana <<u>christiana.ho@hq.doe.gov</u>>

**Subject:** RE: Energy market analysis - S1

(b) (5)

From: Bartol, Bridget < bridget.bartol@hq.doe.gov>

**Sent:** Tuesday, May 31, 2022 8:51 AM

To: DeCarolis, Joe F. (EIA) < joe.decarolis@eia.gov >; Nalley, Stephen (EIA) < stephen.nalley@eia.gov >;

Davis, Christopher < <a href="mailto:christopher.davis@hq.doe.gov">christopher.davis@hq.doe.gov</a>>

**Subject:** Energy market analysis - S1

Hi Joe and Steve,

Hope you had a relaxing weekend. (b) (5)

Defer to Christopher as to whether that needs to be today or tomorrow. We recognize the next STEO is next week and a briefing is already on for Monday afternoon.

Thanks,

Bridget