

UNITED STATES OF AMERICA  
BEFORE FEDERAL TRADE COMMISSION

In the Matter of	)	
<b>Par Petroleum Corporation,</b>	)	Docket No. C-4522
a corporation.	)	PUBLIC VERSION
	)	
	)	

PETITION OF RESPONDENT PAR PACIFIC CORPORATION FOR PRIOR APPROVAL

I. Introduction

Pursuant to Section 2.41 (f)(1) of the Federal Trade Commission's Rules of Practice and Procedure, Par Pacific Holdings, Inc. (formerly Par Petroleum Corporation, hereafter "Par"), the Respondent in the above captioned matter (the "Order"), hereby petitions the Federal Trade Commission (the "Commission") for prior approval of a modification to the Amended Honolulu Terminal Agreement ("Modification") relating to storage of petroleum products at the Barbers Point Terminal as required by Paragraph II.B of the Order.

The present version of the Amended Honolulu Terminal Agreement ("Terminal Agreement") between Par and Aloha Petroleum, Ltd. ("Aloha") restricts Par's storage of petroleum products at Aloha's Barbers Point Terminal located on Oahu, Hawaii.<sup>1</sup> As described below, the purpose of Paragraph II of the Order is to remove an hypothesized constraint on bulk competition in HIBOB in Hawaii. HIBOB is the blending stock for gasoline in Hawaii. The constraint that the Order was supposed to remove was a potential limitation on Aloha's use of its own terminal to import HIBOB into Hawaii in competition with the two Hawaiian refiners. The Commission was concerned about a contract that Par would have inherited as a result of the acquisition that was the subject of the Order. Under that contract, the entity that Par was proposing to acquire had a right to store a substantial volume of petroleum products at the Aloha terminal. Par, according to the theory, could have used the contract to store so much product at the terminal that it would have interfered with Aloha's ability to import HIBOB.

At that time, Par did not have a compelling need to store imported HIBOB at Barbers Point and consequently there were no foreseen substantial adverse effects from restricting Par's storage at the terminal once it completed the (then) proposed acquisition. Indeed, Par and the competing

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<sup>1</sup> The most recent amendment to the Terminal Agreement is the Third Amendment to Terminalling Agreement (Enclosure 11). The original Terminal Agreement (Enclosure 13) and all the amendments must be read to understand the scope of the Terminal Agreement.

refiner were producing more gasoline or gasoline components than the market demanded, resulting in exports, rather than imports of HIBOB or gasoline components.

Circumstances have now changed. While Par continues to operate its Hawaii refinery, its refining competitor has shutdown. The Par refinery alone does not produce enough gasoline to satisfy Hawaii demand. Par also has a contract to supply Aloha with HIBOB. Given its other supply obligations, Par cannot fully supply Aloha from its refinery. To supply Aloha and other customers, Par needs to import and store HIBOB. Par, however, has very few options for the storage of imported HIBOB.

Aloha's Barbers Point terminal is one potential option for receiving the HIBOB that Par wants to import. However, Par needs the Commission's prior approval of Par's proposed Modification to use the Barber Point facility to store and hold imports. If the Commission does not approve this Modification, competition to import and store HIBOB would be unduly restricted. This could result in higher prices in Hawaii, the opposite of what the Commission intended.

## II. Summary of Relevant Facts

### A. The Parties

Par was and is a publicly traded energy company engaged in refining and marketing of petroleum products in Hawaii. Par, through a subsidiary, owned and operated and continues to own and operate a refinery in Hawaii. It also sold and continues to sell gasoline through retail outlets.<sup>2</sup> In 2014, Par proposed acquiring Koko'oha Investments, Inc., which owned the membership interests of Mid Pac Petroleum LLC ("Mid Pac").<sup>3</sup> Mid Pac distributed gasoline and other petroleum products in Hawaii through branded retail outlets and through sales to third parties.

Par wanted to acquire Mid Pac to gain additional outlets for the gasoline manufactured at its refinery. While not an objective of the acquisition, Par would have inherited Mid Pac's contractual right to store petroleum products at Aloha's Barbers Point Terminal.<sup>4</sup>

### B. Effects of the Mid Pac Acquisition

The Commission was not concerned about Par acquiring Mid Pac's gasoline outlets. It concluded, however, that Par's acquisition of Mid Pac's contractual rights to store product at Aloha's Barbers Point terminal was likely to lessen competition and lead to higher prices for the bulk supply of HIBOB in Hawaii.<sup>5</sup> HIBOB is Hawaii Blendstock for Oxygenate Blending. When HIBOB is combined with ethanol and additives, it becomes the gasoline most Hawaii motorists

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<sup>2</sup> Complaint, Dkt. No. C-4522 ("Complaint"), ¶¶ 1-2.

<sup>3</sup> Id. at preamble to Complaint and ¶ 4.

<sup>4</sup> Id. at ¶ 11.

<sup>5</sup> Id.

purchase at the pump.<sup>6</sup> By “bulk supply,” the Commission meant supply in larger than truckload volumes.<sup>7</sup> Two Hawaii refineries, owned by Par and Chevron Corporation (“Chevron”), produced all the bulk supply of HIBOB for Hawaii.<sup>8</sup>

Theoretically, importers could also supply bulk HIBOB to the Hawaiian Islands. The Commission viewed Aloha as a potential importer because it had tank capacity that could accommodate some imported HIBOB at its Barbers Point terminal. This was the only terminal in Hawaii not owned by a local refiner that could “economically import bulk supply of HIBOB.”<sup>9</sup> The Commission hypothesized that Aloha could import or threaten to import to obtain favorable supply prices from the local refiners. Thus, “Aloha[’s] ... import capabilities serve[d] to constrain local refiners’ bulk supply prices of HIBOB.”<sup>10</sup>

Mid Pac had contractual rights to storage at the Barbers Point Terminal. Mid Pac was entitled to store up to 170,000 barrels of regular HIBOB, 30,000 barrels for each of premium HIBOB, ethanol and ULSD, for a total storage amount of 260,000 barrels.<sup>11</sup> Par’s acquisition of Mid Pac’s storage rights at Barbers Point would have result in Par having access to a sizeable portion of the total storage at the Barbers Point Terminal. The Commission concluded that Par’s succession to these contractual rights through the proposed acquisition was likely to lessen competition and lead to higher bulk HIBOB prices.<sup>12</sup> The Commission thought that Par could exploit the Mid Pac contractual rights, perhaps by diverting substantial volumes of HIBOB from storage at its refinery to the terminal and thereby significantly reducing the capacity that Aloha had to import and store HIBOB. As a result, “[t]he Acquisition would weaken the threat of imports and relax a competitive constraint on HIBOB bulk supply prices.” Consequently, “the Acquisition likely would increase the price of bulk supply of HIBOB, which would ultimately lead to higher gasoline prices for Hawaii consumers.”<sup>13</sup>

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<sup>6</sup> Id. at ¶¶ 5-6. There is some gasoline without ethanol sold in Hawaii.

<sup>7</sup> Id. at ¶ 7.

<sup>8</sup> Id. at ¶ 10.

<sup>9</sup> Id.

<sup>10</sup> Analysis of Agreement Containing Consent Order to Aid Public Comment, *In the matter of Par Petroleum Corporation*, File No. 141-0171 (“Analysis”) at 2.

<sup>11</sup> Terminal Agreement between Aloha Petroleum, Ltd. and Mid Pac Petroleum LLC (September 30, 2005) (also known as the “Barbers Point Terminal Agreement” and also known as the “Terminalling Agreement”) (Enclosure 1).

<sup>12</sup> Complaint ¶ 11.

<sup>13</sup> Analysis at 3.

C. The Order's Resolution of the Competitive Concern

The Order remedied this competitive concern by “preserving flexibility for HIBOB imports at Barbers Point Terminal.”<sup>14</sup> Paragraph II.A of the Order required Par to terminate its rights at the Terminal except for the storage necessary to supply a limited number of tanker trucks that supply Par customers near the Barbers Point Terminal. Specifically, the Order required Par to:

terminate the Barbers Point Terminal Agreement; provided, however, that Respondent [Par] may retain rights necessary to load petroleum products at the Barbers Point Terminal truck rack pursuant to the Amended Honolulu Harbor Terminal Agreement.<sup>15</sup>

Par and Aloha implemented this Order requirement by agreeing to the First Amendment to Terminalling Agreement. Paragraph O.2) of the Amendment limited Par to loading twenty trucks per day at the Barbers Point Terminal.<sup>16</sup> This gave Aloha more control over storage at the terminal and ended the possibility that Par would interfere with Aloha importing and storing HIBOB at Barbers Point.<sup>17</sup>

Paragraph II.B of the Order required the Commission to approve any modification to the remainder of the Agreement related to Par's storage of petroleum products at Barbers Point or any new agreement relating to Par's storage or throughput at Barbers Point:

Respondent shall not, without the prior approval of the Commission, (i) modify the Amended Honolulu Terminal Agreement relating to storage or throughput at Barbers Point Terminal or (ii) enter into any new agreement relating to storage or throughput at Barbers Point Terminal ....<sup>18</sup>

The Commission Analysis offers no rationale for prior approval. It would seem that Aloha could determine how much import flexibility it needs in order to obtain competitive gasoline prices, whether through importing or through new supply arrangements with Par or other suppliers. As the largest single purchaser of HIBOB on Hawaii, its interests seem to be aligned with the Commission's competitive concerns. The Commission decided to second guess Aloha on its use of its terminal for reasons that are not obvious.

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<sup>14</sup> Id.

<sup>15</sup> Order ¶ II.A.

<sup>16</sup> First Amendment to Terminalling Agreement ¶ O.2) (Enclosure 2).

<sup>17</sup> Analysis at 3.

<sup>18</sup> Order ¶ II.B.

## D. Changed Circumstances

### I. Shutdown of the IES Refinery

When the Commission issued the Order, there were two refiners operating in Hawaii, Par and Chevron. Chevron later sold its refinery to Island Energy Services LLC (“IES”), a subsidiary of One Rock Capital Partners LP. While the two refineries were operating, there was an excess of gasoline capacity to serve Hawaii. The same was not true of jet fuel. The two refineries could not supply all the jet fuel needed to serve the market. In 2018, the bonded (non-taxed) imports plus taxable jet fuel barrels consumed was 39,236 barrels per day. Of that volume, imports accounted for 21,932 barrels per day, or 55.9 percent of Hawaii consumption. In 2019 through May, total jet fuel consumed was 339,279 barrels per day and imports accounted for 22,020 barrels per day, or 56.1 percent of consumption.<sup>19</sup> When the refiners produced jet fuel, they produced HIBOB or other gasoline components as co-products. Although the refiners had some flexibility in the ratio of gasoline to jet fuel produced, there were limits to such flexibility. Consequently, to optimize jet fuel production, the refiners produced more gasoline components than the market demanded and exported the surplus.<sup>20</sup> The important point here is that neither refiner, nor anyone else, needed to import HIBOB (except potentially when there was a refinery turn around or other outage).<sup>21</sup>

Eventually, IES decided its acquired refinery was not viable and terminated refining operations. That resulted in a shortage of indigenously-produced gasoline in Hawaii. Hawaii consumed about 30,240 barrels per day of finished gasoline in 2018 and about 30,023 barrels per day of finished gasoline in 2019 through May, according to Hawaii’s Department of Business, Economic Development and Tourism (DBEDT).<sup>22</sup> Because about ten percent of this is ethanol, HIBOB demand is about 27,300 barrels per day. The market needs ██████████ barrels per day to fill the gap based on Par’s projected HIBOB production.<sup>23</sup>

<sup>19</sup> DBEDT Monthly Energy Data; EIA Company Level Imports. According to EIA, Par’s imported share was 37.1% in 2018 and 28.1% in 2019 through May. [http://files.hawaii.gov/dbedt/economic/data\\_reports/energy-trends/Monthly\\_Energy\\_Data.xlsx](http://files.hawaii.gov/dbedt/economic/data_reports/energy-trends/Monthly_Energy_Data.xlsx). EIA Company Level Imports provides data through June, where Par’s imported share would be 30.5% from Jan-June 2019.

<sup>20</sup> When Par acquired Mid-Pac in 2015, the Par LP runs showed significant export sales of gasoline, ranging from ██████████ bpd for the November 2013 runs as well as gasoline blending component exports, mainly naphtha, ranging from ██████████ bpd. GRTMPS LP Solution Summary-HIE Kapolei Refinery, Par’s Response to Additional Information In the Matter of Par Petroleum Corporation’s Proposed Acquisition of Koko’oha Investments, Inc. to Specification 5(a), see Exhibit 5(a) tab 11-2013 (Enclosure 3). Because of the Mid Pac acquisition, Par was able to place more gasoline in Hawaii but was still exporting approximately ██████████ barrels per day.

<sup>21</sup> According to EIA, there were zero gasoline imports in 2018. But in 2019 through June, EIA reports IES as the only importer of gasoline with a total amount of 1,781,000 barrels, or 9,840 barrels per day. <https://www.eia.gov/petroleum/imports/companylevel/>

<sup>22</sup> [http://files.hawaii.gov/dbedt/economic/data\\_reports/energy-trends/Monthly\\_Energy\\_Data.xlsx](http://files.hawaii.gov/dbedt/economic/data_reports/energy-trends/Monthly_Energy_Data.xlsx)

<sup>23</sup> Par’s projected production is set forth in slide 15 of Enclosure 4.

IES now imports HIBOB and other petroleum products. According to EIA's Company Level Import data,<sup>24</sup> IES imported about 9,840 barrels per day of conventional gasoline during the first six months of 2019, which is close to the import level that satisfies market demand. IES uses its offshore multipoint mooring ("MPM") to unload HIBOB and other petroleum products from tankers. From the MPM, pipelines transport the products to IES refinery tanks that IES formerly used to store petroleum products manufactured at the refinery. IES distributes the imported products at its retail gasoline outlets as well as being open to selling such products to wholesalers and end users. In other words, IES remains a direct competitor of Par by importing product rather than refining crude oil.

## 2. The Par Acquisition of IES Topping Units

Before it shuttered the refinery, IES proposed selling certain refinery equipment to Par. This included refinery topping units, primarily distillation columns.<sup>25</sup> The Staff investigated the acquisition pursuant to Paragraph III.A. of the Order.<sup>26</sup> Paragraph III of the Order required Par to provide prior written notice of any acquisition of any leasehold, ownership, or any other interest in any assets engaged in the bulk supply of HIBOB to Hawaii. If Par submitted such a notice, Paragraph III.B. of the Order permitted the Commission to undertake a second-request-like investigation before Par could consummate the acquisition.<sup>27</sup>

Par was not proposing to acquire any equipment that it would use to produce HIBOB. But as part of the proposed acquisition, Par and IES entered into a Terminalling, Throughput and Storage Agreement.<sup>28</sup> [REDACTED]

<sup>24</sup> <https://www.eia.gov/petroleum/imports/companylevel/>

<sup>25</sup> Topping Unit Purchase Agreement (Enclosure 5). A refinery topping unit is usually defined as tankage, a distillation unit, recovery facilities for gases and light hydrocarbons, and the necessary utility systems (steam, power, and water-treatment plants).

<sup>26</sup> Paragraph III.A. of the Order states, in part: "Respondent shall not, without providing advance written notification to the Commission, acquire, directly or indirectly, through subsidiaries or otherwise, any leasehold, ownership interest, or any other interest, in whole or in part, in any Person, corporate or non-corporate, or in any assets engaged in Bulk Supply of Hawaii-grade gasoline blendstock in the state of Hawaii ...."

<sup>27</sup> Paragraph III.B. of the Order states, in part:

The prior notification required by this Paragraph III. shall be given on the Notification and Report Form set forth in the Appendix to Part 803 of Title 16 of the Code of Federal Regulations as amended (hereinafter referred to as "the Notification"), and shall be prepared and transmitted in accordance with the requirements of that part . . . . Respondent shall provide the Notification to the Commission at least thirty (30) days prior to consummating the transaction (hereinafter referred to as the "first waiting period"). If, within the first waiting period, representatives of the Commission make a written request for additional information or documentary material (within the meaning of 16 C.F.R. § 803.20), Respondent shall not consummate the transaction until thirty (30) days after submitting such additional information or documentary material.

<sup>28</sup> Exhibit E to the Topping Unit Purchase Agreement at 162 (Enclosure 5).

[REDACTED] <sup>29</sup> [REDACTED] <sup>30</sup> Because this arrangement included the possibility that IES would store HIBOB for Par, the FTC staff concluded that Par was proposing to acquire a leasehold, ownership, or another interest in assets engaged in the bulk supply of HIBOB to Hawaii, thereby triggering the prior notice provision.

Par responded to an extensive “second request” and IES responded to a voluntary request of similar scope. The staff investigation focused on two issues. First, it investigated whether IES independently determined to shut down its refinery or whether Par induced IES to shut down its refinery. Second, it investigated whether the Par-IES agreements regarding storage would undermine IES’s ability to import.<sup>31</sup>

The Staff did not oppose the acquisition, suggesting that the Staff concluded that IES independently determined to shut down the refinery and that the storage arrangements did not interfere with IES’s ability to import product. In fact, in the negotiations to acquire certain IES refining equipment, Par sought more storage than IES would agree to.

The shutdown of the IES refinery changed the market. As noted, while there had been refining capacity at the two refineries to produce more than enough HIBOB for Hawaii, after the IES shut down, there was a gap to be filled by imports of [REDACTED] barrels per day. Bulk HIBOB imports obviously must be stored until needed. As a result, competing to provide capacity to store HIBOB imports has become an important component of competition. Right now, IES enjoys a near monopoly in this component of competition, at least from Par’s perspective.

Well before IES announced its shutdown, Aloha was concerned that IES would close its refinery. In the last round of contract negotiations for HIBOB supply, Aloha contracted to purchase supply from both IES and Par. But it demanded and received from Par an agreement obligating

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<sup>29</sup> Id.

<sup>30</sup> The Terminalling, Throughput and Storage Agreement identifies two types of storage at IES’s facility, which IES continues to own and operate. First, there is “Dedicated Storage” for crude oil. Second, there is “Fungible Storage,” which is the relevant storage for this analysis. Paragraph 2 of Exhibit E to the Terminalling, Throughput and Storage Agreement states:

[REDACTED]

<sup>31</sup> In addition to the fungible storage agreement, IES agreed to lease crude oil tanks to Par to accommodate its expanded refining operation.

Par to supply [REDACTED].<sup>32</sup> The [REDACTED] supply in the contract is known as “Tier 2” supply.<sup>33</sup> About the time IES shut down, Aloha exercised its contractual right to obtain Tier 2 supply from Par.<sup>34</sup>

Par, however, did not have enough HIBOB refining capacity to supply Tier 2 HIBOB to Aloha as well as meet its other commitments. Par is short about [REDACTED] barrels of HIBOB per day. To satisfy the Aloha contract, Par must import HIBOB.<sup>35</sup> The Par-Aloha supply agreement requires Par to supply ratably.<sup>36</sup> There are technical reasons for this regarding the supply from the refinery that is transported to Aloha by pipeline.<sup>37</sup> There are also business reasons that Aloha wants ratable supply: Aloha, and other wholesalers/retailers like Aloha, want ratable supply to avoid financing bulk cargoes. It ties up too much of the wholesaler/retailer’s capital.<sup>38</sup> And, if the wholesaler/retailer finances and stores a cargo, it risks falling prices in the local market reducing

<sup>32</sup> Par Hawaii Refining, LLC Product Contract—171109S – Aloha term Bulk Contract (Enclosure 6) (hereafter “Par-Aloha Supply Agreement”).

<sup>33</sup> Under the “Par-Aloha Supply Agreement (Enclosure 6), the “Tier 2 volume quantities ... are offered as a BUYER’s [Aloha’s] option ....” The Tier 2 volumes are set forth in Appendix B of the Product Contract. The total volume of HIBOB Regular and Premium in Appendix B is [REDACTED] barrels per day.

<sup>34</sup> Aloha exercised its right to receive Tier 2 volumes beginning on [REDACTED] and continuing through the end of the contract [REDACTED]. Aloha Notice Pursuant to Product Contract (Enclosure 7).

<sup>35</sup> As will be discussed further, Par could also try to buy HIBOB from IES.

<sup>36</sup> The “Quantity (Tier 1)” provision, of the Par-Aloha Supply Agreement (Enclosure 6) provides:

Pipeline deliveries into the Aloha Honolulu terminal are subject to a maximum batch limit due to volume restrictions on the facility’s vapor recovery unit (the “Maximum Batch Volume”). PHR will make a [REDACTED] delivery to the Aloha Honolulu terminal with a total delivered volume equal to [REDACTED].

The “Quantity (Tier 2)” provision, of the Supply Agreement provides:

HIBOB Products nominated on Oahu may be delivered to either the TFM Terminal [the Aloha Barbers Point terminal] or Honolulu Terminal, subject to the Honolulu Terminal vapor recovery unit restrictions noted under the Tier 1 section above.

The vapor recovery restrictions limit the pace at which Par can move HIBOB from the refinery by pipeline into the Honolulu terminal. These restrictions would also increase the time it takes to offload a cargo at the Aloha Honolulu terminal *if* it were possible to unload a cargo into the Honolulu terminal. That is not possible now because Aloha’s gasoline pipeline from its dock to its terminal is out of service and has been for a substantial period. Par does not know the cost and time it would take to put it back in service but expects that the cost would be substantial.

<sup>37</sup> See note 36, *supra*.

<sup>38</sup> Aloha would need to invest in large, lumpy cargoes to have a regular import operation. During 2018 through March 2019, the U.S. average refiner-price of bulk gasoline (excluding taxes) has varied from \$1.499 to \$2.090 per gallon according to EIA. EIA, U.S. Regular Gasoline Bulk Sales Prices by Refiners (Dollars per Gallon) ([https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMA\\_EPMR\\_PBR\\_NUS\\_DPG&f=M](https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMA_EPMR_PBR_NUS_DPG&f=M)). This price likely understates the price delivered to Hawaii as international ocean freight needs to be added. This is between \$63 and \$88 per barrel. The value, excluding freight, interest and port fees, is between \$15.75 million and \$22 million for a 250,000-barrels cargo using EIA’s bulk refiner prices as a benchmark.



the value of its product inventory (perhaps below the cost to acquire the inventory).<sup>39</sup> Thus, Par generally supplies Aloha on a [REDACTED] basis. This also means that Par would need tanks to store imported HIBOB for Aloha while it worked off the inventory.

Par has limited options for obtaining and storing HIBOB beyond its refinery production. One potential option is for Par to buy HIBOB from IES ratably and supply that purchased HIBOB to Aloha.

Second, Par might import HIBOB by contracting for 300,000-barrel cargoes that would be delivered to Oahu in Medium Range (“MR”) tankers. If Par were to import a smaller volume, it would cost substantially more. Based on Par’s experience, a rough estimate of the difference in the cost of importing in a smaller vessel is that it costs [REDACTED] to move a cargo from Asia to Hawaii regardless of the cargo size. It also would cost an additional [REDACTED] to unload at Barbers Point Harbor. If the vessel partially unloaded at Par’s refinery as well, the cost to unload would rise from [REDACTED]. So, for example, if Par contracted for a 200,000-barrel cargo rather than a 300,000-barrel cargo of HIBOB, offloading at a single harbor in a single berthing, the cost per barrel would be \$ [REDACTED] per barrel higher or almost [REDACTED] per gallon. If Par had the choice to unload the 300,000 barrel cargo of HIBOB in two berthings, or the 200,000 barrel cargo in one berthing, the 200,000 barrel cargo would still cost \$ [REDACTED] per barrel or [REDACTED] cents per gallon more for delivery than the larger cargo.<sup>40</sup>

Par, however, cannot store [REDACTED] barrels of HIBOB at its refinery. It only has storage capacity for about [REDACTED] barrels of HIBOB beyond its refinery production. Par’s total combined naphtha<sup>41</sup> and gasoline working tank capacity is [REDACTED] barrels. This capacity is located at Par’s “East refinery.” The Par “West refinery” is a portion of the former IES refinery facility. Par does not own any tanks to store HIBOB at this facility, as IES retained all of the product tanks. Of Par’s total working storage, a minimum of [REDACTED] barrels is required to store naphtha to manage day-to-day refinery operations. Par East also has HIBOB dedicated storage of [REDACTED] barrels. Par uses this storage capacity to manage multiple streams running off refinery units for multiple HIBOB blending grades, satisfying settling time requirements, quality assurance testing, and multiple

<sup>39</sup> While there are means of hedging risks related to international price movements, there are no tools that allow the hedging of local risk, e.g., prices falling in Hawaii unrelated to international price movements.

<sup>40</sup> If we compare a 300,000 barrel cargo versus a 200,000 barrel cargo, both unloaded at a single berthing, the cargo would cost \$ [REDACTED] to deliver whether it is a 300,000 or 200,000 cargo. If it is 300,000 cargo, the cost of delivery would be \$ [REDACTED] per barrel ( $\$ [REDACTED] / 300,000$  barrels). If it is a 200,000 cargo, the cost of delivery would be \$ [REDACTED] per barrel ( $\$ [REDACTED] / 200,000$  barrels). The difference is \$ [REDACTED] per barrel ( $\$ [REDACTED]$ ). This amounts to [REDACTED] cents per gallon ( $\$ [REDACTED] / 42$  gallons). If we assume that the 300,000-barrel cargo requires two berthings while the 200,000-barrel cargo requires one berthing, the smaller cargo still costs \$ [REDACTED] per barrel ( $\$ [REDACTED]$ ) or [REDACTED] per gallon more than the larger cargo. For simplicity, we have disregarded demurrage between multiple berthings.

<sup>41</sup> Naphtha is an intermediate hydrocarbon stream. It is most usually desulfurized and then catalytically reformed, which rearranges or restructures the hydrocarbon molecules in the naphtha as well as breaking some of the molecules into smaller molecules to produce a high-octane component of gasoline.

pipeline and barge schedules. In addition, Par uses these tanks to supply Hawaii consumers in case of outages of gasoline that could otherwise adversely affect multiple islands. Par's objective is to have 15 days of supply in Hawaii in event of unplanned manufacturing outage. Fifteen days of supply amounts to 323,000 barrels of HIBOB at the refinery at all times.

Beyond these tanks, Par has five naphtha/gasoline swing tanks with a working capacity of [REDACTED] barrels, which Par uses to gain the critical mass of naphtha that will reduce the freight costs on naphtha exports<sup>42</sup> or to minimize demurrage for gasoline import cargoes. Par cannot achieve both objectives with the limited capacity available, highlighting Par's need for greater access to Aloha's Barbers Point tanks to operate economically.

The following provides additional details on naphtha/HIBOB storage at the Par East refinery:

- Total naphtha and HIBOB: [REDACTED]<sup>43</sup> barrels
- Minimum tanks in naphtha service needed to run the refinery: [REDACTED] barrels
  - Tank [REDACTED]: light Naphtha to customer— [REDACTED] barrels
  - Tank [REDACTED]: excess and emergency rundown of naphtha [REDACTED] barrels
  - Tank [REDACTED]: full range naphtha feed tank [REDACTED] barrels
  - Tank [REDACTED]: light naphtha for gasoline blending [REDACTED] barrels
- HIBOB tanks: [REDACTED] barrels of working capacity
  - Tanks: [REDACTED]
- Swing naphtha/HIBOB tanks: [REDACTED] barrels<sup>44</sup>
  - Tanks: [REDACTED]

Because of these storage limitations, Par might have to unload [REDACTED] barrels of a [REDACTED] barrel cargo and have the tanker wait until it has distributed the [REDACTED] barrels, then have the tanker drop off a second [REDACTED]. This would result in substantial demurrage charges and is consequently a high cost alternative. For instance, if Par contracted for a [REDACTED] barrel HIBOB delivery, it would have to wait [REDACTED] days between the first and second [REDACTED] barrel delivery and an additional [REDACTED] days [REDACTED]

<sup>42</sup> Par has multiple naphtha specifications for Hawaiian customers, including Hawai'i Gas and for electric generation customers. Hence, Par also uses these tanks for naphtha management in Hawaii. For more on Hawai'i Gas, see "how SNG is Made and Distributed, at <http://www.hawaiigas.com/clean-energy/synthetic-natural-gas/>.

<sup>43</sup> These capacities exclude tank heels. Tank heels are petroleum products located in a tank below the level of the pump suction of such tank.

<sup>44</sup> Any tanks taken out of service for repairs or inspection is pulled from this swing capacity.

delivery. The demurrage would be \$ [REDACTED] per day.<sup>45</sup> This translates into total demurrage charges of \$ [REDACTED]. That is \$ [REDACTED] per barrel or [REDACTED] cents per gallon.

Par might try to store [REDACTED] barrels in IES's refinery tanks under the fungible storage agreement. IES, however, is Par's competitor and has an incentive to limit Par's storage in IES's tanks. It would have the same competitive incentive not to sell HIBOB to Par.

Par would like to have Aloha's Barbers Point terminal as the alternative to IES storage of imported HIBOB. This requires Commission prior approval. In the absence of such approval, Par is facing a monopoly supplier of storage. Because Par has no other practical options, the Order is generating the antithesis of competition. That is, Par cannot play off Aloha and IES to obtain the optimal storage arrangement. Aloha would like to compete for such arrangements and sees no point in leaving its tanks empty when there is a productive use for its tanks. But in the absence of prior approval, Aloha cannot compete with IES to provide storage to Par.

If the Commission granted prior approval, Par would have two potential options. IES and Aloha. With the Aloha option, Par would likely have an easier time obtaining storage at IES. IES would reason, if it does not agree to store Par HIBOB, Par can just store the product at Barbers Point. Par might be able to play off IES and Aloha to obtain a more competitive storage arrangement.

The Order is also now generating absurd consequences from a business perspective. For the time being, Aloha wants to be supplied by Par rather than import HIBOB. Par needs to import HIBOB to supply its customers, including Aloha. Aloha wants to receive HIBOB from Par at its Barbers Point terminal. The Order, however, prevents Par from offloading and storing its imported HIBOB at Aloha's Barbers Point terminal, thereby giving Aloha an ability to import that it does not want while it is being supplied by Par.

### III. The Commission Should Permit Par and Aloha to Join Forces to Import HIBOB

Separately, Aloha and Par are inefficient importers of HIBOB compared to IES. Not only does IES have a refinery site full of tanks to store imported products. It has an offshore multipoint mooring or MPM to accommodate tankers offloading product destined for the refinery tanks or for IES's Honolulu terminal tanks. IES can import large cargoes through its MPM because water depth

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<sup>45</sup> There are berthing costs of about \$ [REDACTED] for each of [REDACTED] deliveries. However [REDACTED]

at the IES MPM is greater than 70 feet,<sup>46</sup> allowing deliveries from Long Range 1 (“LR1”) and lightly-loaded LR2 tankers.<sup>47</sup>

The Kalaeloa Barbers Point Harbor (KBPH), which is the entry-port for Aloha’s Barbers Point terminal and Honolulu Harbor, where Aloha has a second terminal, can only handle a lightly loaded Medium Range 1 (“MR1”) tanker, 225,000 to 280,000 barrels.<sup>48</sup> The size-range for an MR1 is between 190,000 and 345,000 barrels.<sup>49</sup> The United States Army Corps of Engineers recommends limiting draft of tankers and other vessels to 34 feet at KBPH. Water depth at Honolulu is 40 feet,<sup>50</sup> so a safety margin of 2-3 feet limits draft to 37-38 feet generally.<sup>51</sup> The MR1, Handymax and Panamax tank ships drafts are 36-40 feet.

The absence of deep-water access to tankers through offshore moorings like Par and IES is not the only logistical issue that Aloha faces. Hawaii’s 2015 Fuel Pier Study<sup>52</sup> noted multiple issues regarding timely access to the Harbor.<sup>53</sup> Based on 2012 utilization, the Master Plan predicted growing berthing conflicts at Piers 5, 6 and 7, the Piers linked by pipeline to Aloha’s Barbers Point

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<sup>46</sup> SOFEC, Barber’s Point (Tesoro) CALM ([http://www.sofec.com/specSheet/Barbers%20Point%20CALM\(1\).pdf](http://www.sofec.com/specSheet/Barbers%20Point%20CALM(1).pdf)), puts water depth at the former Tesoro, now Par, SPM at 100 feet. Given the wave height (~10 feet), ship size is limited to provide a safety margin.

<sup>47</sup> An LR1 tanker can handle between 345,000 and 615,000 barrels of gasoline, according to EIA (<https://www.eia.gov/todayinenergy/detail.php?id=17991>). An LR2 is about twice the size of an LR1.

<sup>48</sup> Water depth at KBPH is 38 feet. Kalaeloa Barbers Point Harbor 2040 Master Plan, p. 3-4 (“Completed in 1985, the harbor basin was expanded to 114 acres with a depth of minus 38 feet.”). This depth is misleading as the harbor experiences tidal resonance, also known as a seiche, which can generate as much as 8 feet of vertical movement and disrupts cargo-ship loading and unloading. 2040 Master Plan, 3-12. According to the Master Plan, “[s]urge at Pier 1 during the winter months is dangerous enough that it is not usable approximately three months out of the year.” The harbor’s entrance is also narrow compared to other harbors in Hawaii and the “unpredictability and strength of the currents on approach to the narrow channel entrance, in combination with the lack of sufficient navigation aids, are the main risk factors when entering KBPH.” Master Plan, 3-12. The Hawaii Pilots Association labels KBPH “a very high-risk port” compared to other commercial ports in Hawaii. ([http://hidot.hawaii.gov/harbors/files/2015/11/2015-06\\_KalaeloaBarbersPointHarbor2040-Master-Plan.pdf](http://hidot.hawaii.gov/harbors/files/2015/11/2015-06_KalaeloaBarbersPointHarbor2040-Master-Plan.pdf)).

<sup>49</sup> EIA, Oil tanker sizes range from general purpose to ultra-large crude carriers on AFRA scale, September 16, 2014 (<https://www.eia.gov/todayinenergy/detail.php?id=17991>).

<sup>50</sup> USACE, Final Environmental Assessment for Proposed Dredging of Honolulu Harbor, December 2015. The main entry channel was to be dredged to a depth of 45 feet, the main harbor area to be dredged to 40 feet and the Kalihi channel to a depth of 23 ([https://www.poh.usace.army.mil/Portals/10/docs/Civil%20Works%20Dredging/Honolulu%20Harbor%20Maint%20Dredge%20\(EA\)%20151208.pdf](https://www.poh.usace.army.mil/Portals/10/docs/Civil%20Works%20Dredging/Honolulu%20Harbor%20Maint%20Dredge%20(EA)%20151208.pdf)). At the time of this study, the actual depth of Honolulu Harbor was, apparently, less than 40 feet which necessitated the dredging proposal (“Sedimentation within Honolulu Harbor is as much as 20 feet shallower than the authorized design depths ranges, with accumulation generally more pronounced along the periphery of the harbor.”)

<sup>51</sup> Water depth at Pier 51A, used by HFFC, is only 37 feet. Depth is 35 feet at Piers 32 and 34 used for fuel bunkering.

<sup>52</sup> Kalaeloa Barbers Point Harbor 2040 Master Plan, 4-13 (June 2015).

<sup>53</sup> Master Plan, 4-2

Terminal.<sup>54</sup> This concern was shared in task force reports commissioned by the State of Hawaii to determine the impact of the closure of one or both local refineries. The Refinery Task Force Final Reports observed: “General congestion is one concern, but there are also specific factors involved, such as delays in loading/unloading barges.”<sup>55</sup>

The Hawaii Refinery Task Force also opined that for Aloha to import efficiently, it would need access to Tesoro’s (now Par’s) deep-water single-point mooring (“SPM”) system: “[I]t is not clear that they [Aloha] will be able to import as cost effectively as Tesoro [now Par] without access to the Tesoro SPM and refinery tanks.”<sup>56</sup>

The Task Force’s observation about access to Tesoro’s (now Par’s) refinery tanks may be alluding to the challenges that Aloha faces in storing 300,000 barrels of HIBOB (as well as diesel and ethanol). Aloha currently pulls approximately [REDACTED] barrels per day of HIBOB for its own use and to serve its customers (e.g., Costco).<sup>57</sup> From 2003 through 2018, Hawaii’s petroleum industry-maintained gasoline/gasoline blending component inventory between 28- and 40-days of demand. Based on EIA (gasoline inventory) and Hawaii DBEDT data (taxable sales), inventory amounted to 39 days of demand from January 2018 through May 2019.<sup>58</sup> The 39 days of demand includes both safety stocks and working stocks. The working stocks are the volumes needed to keep product flowing. The safety stocks are the volumes needed if there is a disruption, such as a refinery outage. The 39 days of stocks may understate the inventory needs of a stand-alone importer because, historically, the firms holding the inventories were refiners, who also maintain crude oil inventories that would, when refined, satisfy local HIBOB demand. Refiners may face a lower supply risk than pure importer because the refiners can satisfy its HIBOB demand two ways—by refining crude oil and by importing—while the importer can only satisfy its demand for HIBOB one way—by importing.

Par believes that it needs 14 to 21 days of safety stocks. Because Aloha is not a refiner, it would seem to be the more prudent for it to carry more safety stocks than Par. Par has more options for supplying HIBOB to the market in case of an outage and therefore might carry a lower level of safety stocks than Aloha. Par can import HIBOB, or high octane material to be blended with naphtha, using a trading operation that is accustomed to importing into Hawaii; refine crude oil; and consume blendstocks on hand. Aloha can only import HIBOB. Hence, we will use 21 days of

<sup>54</sup> Master Plan, 4-7.

<sup>55</sup> Hawaii Refinery Task Force Interim Report, 26 (November 15, 2013) [https://energy.hawaii.gov/wp-content/uploads/2011/10/HRTF\\_InterimRpt\\_11.12.13.pdf](https://energy.hawaii.gov/wp-content/uploads/2011/10/HRTF_InterimRpt_11.12.13.pdf).

<sup>56</sup> Hawaii Refinery Task Force Initial Report, 28 (June 30, 2013) <https://energy.hawaii.gov/wp-content/uploads/2011/10/HRTFClosureRpt6.18.13.pdf>.

<sup>57</sup> Based on the volume of HIBOB that Par is supplying to Aloha.

<sup>58</sup>[https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=E\\_EPOBG\\_STR\\_SHI\\_MBBL&f=M](https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=E_EPOBG_STR_SHI_MBBL&f=M). This ignores the implicit inventory held in crude oil by refiners.

safety stocks to analyze Aloha's ability to accommodate imported cargoes of HIBOB import. We do this analysis in small steps.

**Step 1.** Assuming that Aloha pulls █████ barrels per day, Aloha would need to maintain █████ barrels of safety stocks when the tanker is approaching Barbers Point. Aloha has █████ barrels of "working" HIBOB capacity at its two Oahu terminals, Barbers Point and Honolulu.<sup>59</sup> Aloha's Honolulu terminal has █████ barrels of HIBOB working capacity and Barbers Point has █████ barrels of HIBOB working capacity. Consequently, if Aloha maintained 21 days of safety stocks, it could only accommodate a shipment of █████ barrels of HIBOB, well below the size cargo contemplated by Par and below the volume of even a lightly loaded MR1. Using the same sort of analysis applied above,<sup>60</sup> the difference in cost between a █████-barrel cargo and a 300,000-barrel cargo is █████ cents per barrel or █████ cents per gallon.<sup>61</sup>

To offload even a lightly loaded MR1 at Barbers Point, █████ barrels, would require Aloha to have virtually no inventory at Barbers Point when the entire cargo is delivered to that terminal. Alternatively, Aloha could accommodate a █████-barrel delivery at some additional cost for two deliveries<sup>62</sup> if it had depleted its collective Barbers Point and Honolulu inventory to █████ barrels (█████ barrels total working storage – █████ MR1 delivery).

**Step 2.** This simple calculation is well off the mark, however, because it does not include Par's present use of Aloha's Honolulu and Barbers Point terminals. Par is using Aloha's terminal truck racks to distribute gasoline by truck to its Oahu customers. It must store product at the Aloha terminals to load gasoline on the trucks at the terminal's truck racks. Theoretically, of course, Aloha could terminate Par's use of the terminals. But Par has no Oahu terminal rack of its own and currently has an agreement with Aloha to continue to use the Aloha Oahu terminals until at least █████. After █████, absent use of the Aloha facilities, Par's only option would be to rely on IES's terminal rack. This assumes that IES agrees to the arrangement and assumes IES could handle Par's current HIBOB supply to Oahu. However, Par's daily Oahu demand is the equivalent of 45 fully loaded trucks per day. Par believes that its gasoline demand, on top of IES's own demand, is too much for the IES truck rack to handle.

<sup>59</sup> Aloha Storage Table (Enclosure 8).

<sup>60</sup> See footnote 40 *supra* and accompanying text.

<sup>61</sup> The calculation assumes offloading at Aloha's Barbers Point and Honolulu terminals. (As we will show in Step 3, *infra*, █████. But we are proceeding with the analysis one step at a time.) This increases the berthing charges to \$█████. As noted above, the cost of moving a tanker from Asia is about \$█████. With total costs of \$█████ for both a 300,000-barrel cargo and a █████-barrel cargo, \$█████ divided by 300,000 barrels amounts to \$█████ per barrel in delivery costs. \$█████ divided by █████ barrels amounts to \$█████ per barrel in delivery costs, which is \$█████ per barrel or █████ cents per gallon (\$█████/42 gallons).

<sup>62</sup> This is "lightly loaded" because an MR1 can handle up to 345,000 barrels of gasoline. KBPH and Honolulu Harbors also limit the size of the cargo in an MR1 due to harbor depth. So even if Aloha had tank-space to handle 345,000-barrel parcels of gasoline at a time, its harbors cannot accommodate cargoes nearly that large.

Whether IES refuses to dispense any of Par's gasoline at its truck rack or took on the limited volume it could handle, there would be no immediate means for Par to distribute all (because of capacity constraints) or any (because IES refuses) of Par's gasoline on Oahu—hardly a competitive outcome—in fact a disastrous outcome. This is not in Aloha's interest, is not in the public interest, and, in fact, is in no one's interest, except perhaps IES.

Accordingly, we need to determine the storage space that Par is now using at Aloha's Oahu terminals. At Barbers Point, under the present arrangement, it is not unusual for Par to maintain a balance of [REDACTED] barrels of HIBOB so that it can supply the local area from Aloha's Barbers Point rack.<sup>63</sup> If forced to, Par might be able to more precisely coordinate its supply to local customers and limit its storage at Barbers Point by more frequently supplying the terminal. But it would still need [REDACTED] barrels of HIBOB storage to maintain an adequate flow of supplies. At the Honolulu terminal, Par has the contractual right to store [REDACTED] barrels of HIBOB.<sup>64</sup> But through more precise planning and more frequent deliveries, it might be able to limit its HIBOB storage needs to [REDACTED] barrels, for a total of [REDACTED] barrels for both Barbers Point and Honolulu.

This would leave Aloha with [REDACTED] barrels of available HIBOB storage on Oahu ([REDACTED] barrels – [REDACTED] barrels). As discussed, Aloha should maintain 21 days of HIBOB safety stocks, [REDACTED] barrels. That leaves Aloha with the capacity to import only [REDACTED] barrels ([REDACTED] – [REDACTED]). Using the methodology applied above, Aloha would be paying \$ [REDACTED] per barrel or [REDACTED] cents per gallon more for a [REDACTED]-barrel cargo than a 300,000-barrel cargo.<sup>65</sup> Aloha might decide to run down safety stocks to uncomfortable levels, well below 21 days of supply. Aloha and any customer relying on Aloha for supply would run the risk of a product outage if Aloha's scheduled tanker arrives late and/or unloading is delayed due to congestion at KBPH. Aloha last imported on its own in 2001, when it was a much smaller company and thus needed much smaller working and safety stocks. Since then, it acquired Shell's retail assets (2010), the Trustreet/USRP retail assets (2005),<sup>66</sup> and a Costco supply contract.

**Step 3.** These exorbitant costs of importing still understate Aloha's costs. Aloha's Honolulu terminal has a HIBOB pipeline from the dock, but it has been out of service for many years. Par understands that Aloha would have to make a significant investment to put this pipeline back into service. Unless it makes such investment, Aloha cannot unload waterborne HIBOB into the Honolulu terminal. Now, the terminal only accepts HIBOB from the Oahu refinery sites, which

<sup>63</sup> Daily Balance Sheet (Enclosure 9)

<sup>64</sup> Enclosure 1.

<sup>65</sup> With transportation costs of \$ [REDACTED] for a 300,000 HIBOB cargo, the transportation cost is \$ [REDACTED] per barrel of HIBOB (\$ [REDACTED]/300,000 barrels). If Aloha can only import 82,000 barrels of HIBOB, the transportation cost per barrel would be \$ [REDACTED] per barrel (\$ [REDACTED]/82,000 barrels). The per barrel difference would be \$ [REDACTED] per barrel.

<sup>66</sup> Aloha's last imported HIBOB in 2005. Trustreet/USRP, then half owner of the Barbers Point terminal, approached Aloha about taking half (or more) of an import cargo Trustreet/USRP had arranged to bring in with a partner, Lex Brodie. Lex Brodie backed out of the deal after the parties contracted for the cargo but before it arrived in early 2005.

have pipelines from the refineries to the terminal. This means that our Step 1 and Step 2 analysis exaggerated Aloha's capacity to accommodate imported HIBOB because it erroneously included Honolulu terminal as a site that could accept imported HIBOB.

The unavailability of the Honolulu terminal has a substantial effect on Aloha's cost of importing. As noted above, Par needs [REDACTED] barrels of working storage at the Barbers Point terminal. With [REDACTED] barrels of HIBOB working capacity, that leaves [REDACTED] of HIBOB capacity for Aloha at Barbers Point. Because Aloha would have no means to store safety stocks at its Honolulu terminal, it would have to store the HIBOB at Barbers Point.<sup>67</sup> While maintaining [REDACTED] barrels of safety stocks, Aloha would only have the capacity to import cargoes of [REDACTED] barrels ([REDACTED] barrels - [REDACTED] barrels). Using the assumption of \$ [REDACTED] to deliver a cargo,<sup>68</sup> a [REDACTED] barrel cargo would cost \$ [REDACTED] per barrel, much more than the \$ [REDACTED] per barrel it costs to deliver a 300,000-barrel cargo. The cost is \$ [REDACTED] per barrel more to deliver the smaller cargo or more than [REDACTED] cents per gallon.

Obviously, Aloha would never attempt to arrange for such small cargoes on its own. Aloha could attempt to lower this cost by seeking partners that would co-load jet fuel for Hawaii. But this will not work either. A [REDACTED] barrels cargo would last Aloha [REDACTED] days. It would need over [REDACTED] cargo per [REDACTED] [REDACTED] cargoes per year that are mostly jet fuel and a small amount of HIBOB. For the 18 months ended June 2019, there were a total of 36 jet imports into Hawaii.<sup>69</sup> Even if Aloha could partner on every jet fuel delivery to Hawaii, the math does not work. Scheduling all these jet fuel cargoes to assure that Aloha received a shipment every [REDACTED] days would also be a nightmare. And, it is hard to see why those delivering jet fuel would have any interest in partnering

<sup>67</sup> Under the circumstances, Par and IES might be willing to deliver HIBOB by pipeline to Aloha's Honolulu terminal as each might want to discourage Aloha from importing HIBOB.

<sup>68</sup> The transportation cost is \$ [REDACTED] rather than \$ [REDACTED] because there is only one drop off point, Barbers Point. Our analysis has used the cost of moving HIBOB from Asia to Hawaii in a tanker.

For a small shipment, we have also considered whether HIBOB could be moved from the West Coast of the United States in a smaller vessel, an ocean-going articulated-tug barge ("ATB"). The Jones Act ATB rate according to OSG has been \$15,000 to \$20,000 per day below the Jones Act tanker rate since 2008. In 2018, the rate was \$37,450 per day. OSG, Overseas Shipholding Group, Inc., 10K at 15 (February 2019), [www.osg.com/Cache/1001248429.PDF?O=PDF&T=&Y=&D=&FID=1001248429&iid=4805113](http://www.osg.com/Cache/1001248429.PDF?O=PDF&T=&Y=&D=&FID=1001248429&iid=4805113). Suppose a time charter takes 14.5-16.3 days round trip travel from the PNW or San Francisco to Honolulu and 3 days to load and unload, where loading and unloading includes time to move the vessel into or away from the loading/unloading facilities. The time is based on an as-the-crow-flies distance of 2,700 miles from Seattle to Honolulu and 2,400 miles from San Francisco to Honolulu and a steam speed of 12 knots (13.8 mph). The cost comes to between \$655,375 and \$722,785, excluding port fees and any expenses not included in the time-charter rate OSG reports. While the transportation in an ocean-going barge appears a bit cheaper, one must also factor the potentially higher price for buying HIBOB produced in the United States.

<sup>69</sup> Source: Hawaii Fueling Facilities Corporation site manager.



with Aloha, given the scheduling complexity and the de minimis benefit of the small HIBOB addition to the jet fuel cargo.

In addition to buying and storing HIBOB, Aloha needs to obtain ethanol from the U.S. mainland. The issue here is not ethanol storage capacity but how much ethanol Aloha would need to import to be self-sufficient. Ethanol has been imported into Hawaii in ocean-going conventional and articulated-tug barges (“ATBs”). According to MARAD, the size of conventional barges and ATBs ranges from 30,000 barrels to 353,000 barrels. Only 11 of the 167 ATBs MARAD lists in the U.S. flag-fleet are smaller than 77,000 barrels.<sup>70</sup> The capacity of most ATBs in the fleet exceed 100,000 barrels. A 77,000-barrel ATB provides enough ethanol to support 770,000 barrels of finished E-10 gasoline, or about 100 days-worth of Aloha’s finished gasoline demand. Importing ethanol economically to be self-sufficient as an importer would expose Aloha to up to three months of [REDACTED]

[REDACTED] Together, Par and Aloha provide Hawaii with an import alternative to IES. To summarize, Par provides deep-water access to offloading tankers through its offshore SPM. Par pipelines from the SPM connect to various storage facilities including Aloha’s Barbers Point and Honolulu terminals.<sup>71</sup> Aloha offers Par access to storage so that it can store [REDACTED] barrels of the imported HIBOB at its refinery and store the remaining [REDACTED] at Aloha facilities.<sup>72</sup> The flip side of these observations is that Par and Aloha compensate for each other’s short comings. Par’s SPM is superior to the congested port that Aloha would have to access. Par could economically import much larger cargoes than Aloha because of Aloha’s limited capacity at Barbers Point, limited appetite for importing, and its need to maintain working and safety stocks. When Par supplies Aloha on a ratable basis, it is also maintaining the safety stocks and much of the working stocks that Aloha would otherwise have to carry. Par is short on capacity for imports. But Par can split the imported product, using its capacity and the Aloha terminal capacity. Aloha, on the other hand, has two Oahu truck racks. Par has no truck rack but must have access to a truck rack to deliver product on Oahu.

<sup>70</sup> There is also the issue of where the ATBs are located; many are located on the U.S. Gulf Coast or East Coast and would not be chartered to move ethanol from the West Coast to Hawaii. Hawaii does not produce any ethanol. In the past, Par has imported ethanol, together with Aloha, in an 80,000 barrels ATB (the Capella, operated by Kirby Marine). Gasoline is unlikely to be imported into Hawaii from the West Coast/Gulf Coast along with ethanol because doing so requires a U.S. flag-vessel (Jones Act), which raises transport costs significantly compared to importing in the foreign-flag tanker. Ethanol is imported from the U.S. because the U.S. is a major producer, and exporter, of ethanol. The other major ethanol source is Brazil where ethanol is more expensive than in the U.S.

<sup>71</sup> Enclosure 12 is a map identifying the pipelines.

<sup>72</sup> Par is also able to manage local refining and importing better than a pure importer. For example, as discussed above at page 13, *supra*, the delivery date of the import is more critical for an importer with limited capacity than it is for Par.

#### IV. The Outage of Par's Catalytic Reforming Unit

A catalytic reforming unit ("CRU") converts petroleum refinery naphthas with low octane ratings into high-octane reformates. Refiners use these reformates as components of gasoline. On July 15, 2019, Par began the process of regenerating the catalyst in its CRU. This involves injecting caustic material to remove carbonaceous coke. The process was expected to take eleven days. On July 22, however, while Par was in the process of drafting this Petition, Par suffered a catastrophic failure on a 16" pipeline. Following repairs to the pipeline, Par unsuccessfully attempted to restart the CRU on three occasions, each attempt resulting in a leak from heat exchanger tubes. These turned a planned eleven-day CRU outage into a 34-day outage.

During the CRU outage, the refinery produced large quantities of naphtha (about [REDACTED] barrels, or [REDACTED] barrels per day) that PAR could not use to produce gasoline because of the loss of the high-octane reformat needed to obtain the necessary octane level for gasoline. As Par continued to supply customers, it depleted its gasoline inventories at the refinery. Ultimately, on August 21, Par was able to restart the CRU, and produce gasoline at reduced rates. To bridge its inventory shortfall, Par borrowed [REDACTED] barrels of regular unleaded HIBOB and [REDACTED] barrels premium unleaded HIBOB from IES.<sup>73</sup> Par also imported [REDACTED] barrels of regular unleaded HIBOB (along with [REDACTED] barrels of ultra-low sulfur diesel) on an expedited basis, and at significant cost, on a Jones Act vessel, PELICAN BAY, departing from PNW. Par contracted for a second import of high-octane reformat material that arrived in Hawaii in September.

Because the PELICAN BAY vessel was fully-loaded, it could not meet the draft requirements for Barbers Point Harbor. In addition, the port was heavily congested with other vessels. But even if the PELICAN BAY could have met the draft requirements for Barbers Point and Barbers Point was less congested, the Commission Order prohibits Par from unloading that size cargo of product that Par would continue to own while stored at Aloha's Barbers Point terminal. Par had to unload the first and second vessels at its SPM. Because of tankage constraints and congestion, both the first and second imports require multiple berthings.<sup>74</sup>

While in this instance Par could not have stored the imported HIBOB at Barbers Point, the next outage might occur under conditions where Par could store product at Barbers Point but for the prohibition contained in the Order. Under such circumstances, Par would be paying for multiple berthings and demurrage for no good reason.

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<sup>73</sup> Because Par has so little capacity for imported HIBOB and would have to bear substantial demurrage costs if it imported HIBOB, it was less expensive to arrange an exchange with IES than to import HIBOB when IES had enough HIBOB stocks to agree to such an exchange. However, there were limits on the availability of HIBOB from IES, prompting Par to arrange for two imported cargoes.

<sup>74</sup> For the second cargo, the multiple berthings are not be on Oahu. The initial berthing was at the SPM on Oahu. The second berthing is at Par's refinery in Tacoma, Washington.

The outage highlights two issues. First, Par needs to hold safety stock, to ensure a continued supply of fuel to the public in the event of disruptions to production, weather or other delays on imported product and other events. Ideally, Par would hold a safety stock equal to 14 to 21 days of demand.

In addition, Par needs working storage to support day-to-day deliveries of fuel. This working storage capacity supports Par's barge deliveries to the Neighbor Island on a ten-day rotation, and weekly pipeline deliveries on Oahu. Par estimates that it needs 14 days of working storage. Par has Neighbor Island HIBOB storage capacity of [REDACTED] barrels.<sup>75</sup> Par also includes in working storage [REDACTED] barrels of swing naphtha/HIBOB storage capacity at the refinery. In addition, we have assumed that Par would store about [REDACTED] barrels of HIBOB at the two Aloha Oahu terminals, even though it has stored more there in the past.<sup>76</sup> Adding each of these components, results in [REDACTED] barrels in total, which is almost [REDACTED] days of Par HIBOB supply for Hawaii. We do not include this HIBOB working storage capacity in our safety stock calculation because the volume of working inventories goes up and down as Par drains and replenishes inventory.

Par's Hawaii demand for HIBOB is about [REDACTED] barrels per day (including Par's supply to Aloha), resulting in a 15-day safety stock requirement of [REDACTED] barrels of HIBOB.<sup>77</sup> Par has 331,000 barrels of HIBOB storage at its refinery, which is just about enough for [REDACTED] days of safety stocks.<sup>78</sup> (For 21-days of HIBOB safety stocks, Par would need [REDACTED] barrels of HIBOB storage capacity.) The problem that Par faces is that it does not have sufficient capacity to import a [REDACTED] barrel cargo. To accommodate as much of the cargo as possible in one berthing, Par would have to work off the product in the [REDACTED] barrel swing capacity and work off the [REDACTED] barrels of HIBOB stocks at Aloha's Barbers Point terminal. It may be unrealistic, however, to include all of

<sup>75</sup> [REDACTED]

<sup>76</sup> Under the Terminal Agreement, Par can store [REDACTED] barrels of HIBOB at the Honolulu terminal (Enclosure 1). Our analysis has conservatively limited Par's Honolulu storage to [REDACTED] barrels of HIBOB under the assumption that Aloha might wish to limit Par's capacity at Honolulu in a future contract if it were importing and if it invested to restore an idle pipeline that would allow marine cargoes to offload at the Honolulu terminal. At the Barbers Point terminal, consistent with the Order, Par does not presently have a right to store a specific volume of HIBOB but can store a sufficient volume to load petroleum products on tank trucks at the Barbers Point Terminal truck rack pursuant to the Terminal Agreement. See footnote 15 and accompanying text. Par has on occasion stored more than [REDACTED] barrels of HIBOB at Barbers Point to service the trucks delivering gasoline to local customers. Par, however, believes it can more precisely coordinate its supply to local customers and limit its storage to [REDACTED] barrels of HIBOB if it must. See footnote 63 and accompanying text, *supra*. As a result, we have used [REDACTED] barrels of HIBOB storage in the analysis of Par's working storage capacity and our analysis Aloha's safety stock requirements.

<sup>77</sup> See discussion at page 19, *supra*.

<sup>78</sup> If Par settles for 14 days of safety stocks, [REDACTED] barrels, it would have enough capacity for safety stocks.

the ██████ in available Barbers Point capacity because, in the absence of perfect timing, Par would have no HIBOB stock at Barbers Point to supply customers who Par has been supplying from that location, including Aloha. Nevertheless, in this world of perfect timing, Par only has 198,000 barrels of HIBOB capacity to accommodate a ██████ barrel marine cargo of HIBOB.<sup>79</sup> For this reason, the proposed Fourth Amendment to Terminalling Agreement gives Aloha discretion to increase the storage capacity available to Par in connection with imports.

This is simply not enough capacity. The bill to Par from the PELICAN BAY is estimated to be \$ ██████ for demurrage alone. To get the bill down to this level, Par had to export ██████ barrels of naphtha to make room for the HIBOB on the PELICAN BAY.<sup>80</sup> Demurrage on the second cargo is lower, but this is because the vessel is delivering its cargo to two refineries. But that has its own substantial costs. Additional storage at Barbers Point could eliminate the cost of multiple berthings or at least the cost of demurrage. It would also provide additional capacity for Par working and safety stocks.

#### V. The Proposed Modification to the Amended Honolulu Terminal Agreement

Storage has become an essential feature of market competition. In the absence of the requested approval, the Order stifles this form of competition. Because of the Order, Par's only realistic option to store imported HIBOB is IES. From Par's perspective, in the absence of prior approval, the Order has turned IES into a bulk-HIBOB-storage monopolist. The proposed Modification, the Fourth Amendment to Terminalling Agreement, would provide Par with another competitive option. From Aloha's perspective, it has capacity it would like to employ, but, in the absence of prior approval, the Order bars Par from using that capacity. Indeed, the Order bars Par from using that capacity to supply Aloha. From a consumer welfare perspective, it makes no sense to prevent storage competition or to keep Aloha storage capacity idle if Aloha offers the optimal facility on the island to store a portion of Par's imported HIBOB or safety stocks. Thus, it is in the public interest to approve the Modification.

Granting prior approval is consistent with the Order, whose objective is to encourage import competition and to foster competitive pricing for HIBOB. As set forth above, neither Par nor Aloha are competitive importers individually, but are competitive if they can join forces. In the absence of Commission approval, HIBOB prices could be higher than with prior approval

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<sup>79</sup> Par cannot unload a marine cargo at Aloha's Honolulu terminal. It could over time transport by pipeline the marine cargo to the Honolulu terminal from the Par refinery's swing capacity where it would be initially stored. But the marine cargo's first stop would have to be the refinery swing capacity. Moreover, the need for perfect timing of deliveries becomes even more important if Par is draining all of its stored HIBOB from both Aloha terminals. As noted, Par relies on these two terminals for all of its gasoline deliveries on Oahu.

<sup>80</sup> The export of naphtha did not provide Par with enough storage to offload the PELICAN BAY cargo in a single session because Par needed tankage to handle naphtha and gasoline during the restart and subsequent operations of the CRU.

because Par is likely to be the marginal importer of HIBOB. If Par does not have competitive options, its costs of importing and storage could be higher, and this could translate into higher prices for gasoline. If Par and Aloha can join forces it also offers Par the ability to increase safety stocks for planned and potentially unplanned outages. Outages can result in price increases, and safety stocks are a way of moderating such price increases

The enclosed proposed Modification is titled the Fourth Amendment to Terminalling Agreement.<sup>81</sup> In this Amendment, Aloha will make available to Par [REDACTED] barrels of HIBOB storage, subject to “availability, physical storage constraints, and nomination procedures.” Under Paragraph D.1), the limit on regular unleaded gasoline is [REDACTED] barrels and the limit on premium is [REDACTED] barrels. This is substantially less than the peak storage that Par has used to supply its maximum of 20 trucks per day.<sup>82</sup>

Under the Modification, beyond the [REDACTED] barrels, Aloha can, “at its sole discretion:” make additional storage space available to Customer [Par] under the following circumstances:

[REDACTED]

Aloha can offer additional storage to Par for the purposes of [REDACTED]. With Commission approval of this provision, Par could store [REDACTED] barrels of imported HIBOB at Barbers Point. Presumably, Aloha would only enter into a supply agreement with Par and permit Par to store imported HIBOB at Barbers Point if that was superior to Aloha importing HIBOB on its own. Aloha never loses the threat of importing when the parties attempt to negotiate a new supply agreement. Thus, the Modification is consistent with the objective of the Order: to assure that Aloha has the flexibility to import if that is the low-cost option. And, Aloha can enter into a new supply agreement with Par if that is the low-cost option. In the absence of Commission approval of the Modification, it would be difficult for Par to enter into a new supply agreement of the same magnitude with Aloha even if that is the low-cost option for Aloha.

<sup>81</sup> Fourth Amendment to Terminalling Agreement (Enclosure 10)

<sup>82</sup> Daily Balance Sheet (Enclosure 9).