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Mr. Stephen Posner Manager Washington State Energy Facility Site Evaluation Council 1300 S. Evergreen Park Drive SW Olympia, WA 98504-3172

Mr. Jesus Sanchez Director Washington State Governor's Office for Regulatory Innovation and Assistance Town Square, Building 4 1011 Plum Street SE Olympia, WA 98504-0002

Gentlemen:

Waterside Energy, Inc (Waterside) is pleased to provide you with some background and preliminary information related to our proposed energy projects in Washington State. Based on our review of applicable statues we believe that the Washington State Energy Facility Site Evaluation Council (EFSEC) will have jurisdiction over the projects and we look forward to working together through the review and permitting/Site Certification Agreement (SCA) process.

### Project Overview

Waterside, through its subsidiary Riverside Refining, LLC (Riverside) is proposing the construction and operation of a 45,000 barrel per day (Bpd) refinery located at the Port of Longview. The refinery will process 30,000 Bpd of light-sweet shale derived crude oil and 15,000 Bpd of sustainable seed and vegetable oil, used cooking oils (UCO) or other renewable feedstocks. Upon completion the refinery will generate daily volumes of approximately:

<u>Product</u>	Barrels per Day
LPG	1,600
Reformulated gasoline	9,800
Renewable diesel/jet fuel (R100)	15,300
ULSD	5,500
Kerosene (jet)	4,900
Atmospheric residuals	8,300

Riverside's products will be transported by barge to local and regional markets, or if required by market conditions or competitive pressures, by larger vessels to other West Coast markets. Riverside is working with Tidewater Transportation and Terminals of Vancouver Washington as its exclusive barge partner for transport of refined products on the Columbia River. If local demand warrants the investment, Riverside will also build out a truck rack for local consumption of Riverside products.

Crude oil for the refinery will be sourced from mid-continent shale oil fields and transported to the site on units trains of 100 to 120 cars each. A volume of 30,000 Bpd of crude oil refining requires between 2.5 and 3 trains per week, depending upon tank car design and regulations, and train sizes. See below under Rail Terminal for a further discussion on unit train handling and volumes.

Renewable feedstocks will initially be sourced international as sufficient quantities of regional domestic supply are not currently available. Riverside will receive renewable feedstock by water via medium and large liquids carriers. Plans call for receipts of between 65,000 and 75,000 metric tons (450,000 to 500,000 barrels) per vessel for off-load and storage on-site.

Riverside has selected the world's leading provider of traditional crude refining technology, UOP, a subsidiary of Honeywell, as its technology provider and partner. UOP refining processes are licensed and used in over 50% of worldwide crude refineries. Riverside will also be using UOP's Ecofining<sup>™</sup> process to produce the 15,000 Bpd of renewable diesel and green jet fuel. These renewable products are drop in replacement fuels that can be comingled with fossil fuel based fuels for storage, transport and consumption.

# Siting

Riverside has selected the Port of Longview in Cowlitz County as the proposed location for its facilities. The refinery requires the following primary areas of operations:

ISBL (Inside Battery Limit) - the main processing area	11 acres
Rail off-load terminal	10 acres
Storage tanks	25 acres
Vessel load-out/receiving	under 1 acre

### Rail Terminal

The Port is currently served by two Class I railroad lines. Crude trains will area to the site via the Ports existing lead from the Class I mainline.

In order to receive full unit trains Waterside intends to develop a rail receiving terminal capable of off-loading trains in under 12 hours. Given that the refinery only requires a train every 2 to 3 days the terminal will have significant unused capacity. Waterside is considering options to provide terminal services for other parties to help justify the over \$60 million in rail and off-loading related terminal cost the project requires. As part of our permit planning we

wish to determine how best to permit the refinery while maintaining options for spreading the terminals cost amongst other users. This includes the possible receiving, storage and load-out of other hydro-carbons including LPGs.

## Vessel Operations

Riverside intends to ship the majority of its refined products to local and regional markets via river barges. These barges are already operated on the Columbia River by Tidewater Barge. No changes in current river operations are required to support the Riverside project. Working with the Port of Longview, Riverside will add load-out capabilities for refined products at an existing berth at the Port. Limited, if any, berth improvements are required to support this element of the project.

Receipt of renewable feedstocks will arrive in larger ocean going vessels. A shipment approximately every 25 to 30 days will arrive at an existing Port berth for off-load to dedicated feedstock storage tanks. Other than the addition of on-shore receiving apparatus, no major berth improvements are anticipated to support this activity.

### **Technologies**

The projects technology partner, UOP, has significant worldwide experience in the design, engineering, fabrication and construction of all required process units. As a smaller scale refinery the project lends itself well to use of a modular design where major process units are fabricated offsite, transported by water to the Port and placed on preset foundations. The project will use BACT in its design and engineering of all project components. As a greenfield project Riverside has the advantage of using the most current and environmental friendly control and operating processes.

The refinery is being designed to comply with Washington States proposed Carbon Fuel Standards at the 10-year target threshold upon initial commissioning. This can be achieved because 33% of the refineries output will be renewable products along with the use of low sulfur feedstocks and employment of hydro-skimming processes. This lower carbon footprint is aided by use of current technologies design and process efficiencies.

We recognize the above is a very high level overview of our proposed project. We look forward to providing more detail as we move forward with EFSEC.

Best regards,

Lou Soumas Chief Executive Officer