## TESTIMONY OF MICHAEL KLEIN OF LIGHTHOUSE RESOURCES INC.

## BEFORE THE U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON NATURAL RESOURCES SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

## JULY 24, 2018

Thank you Chairman Gosar, Ranking Member Lowenthal and Members of this Subcommittee. I appreciate the invitation and opportunity to share my views regarding *"Assessing Innovative and Alternative Uses of Coal."* I have learned that western U.S. coal exports are important to the geopolitical security of the Indo Pacific Region and to the national security of the United States.

My name is Michael Klein, Vice President of Legal and Business Development for Lighthouse Resources. Lighthouse is headquartered in Salt Lake City, Utah, mines coal in Montana and Wyoming and is developing a coal terminal in Longview, Washington for exporting Lighthouse and other third party western coal to Asia because U.S. coal export capacity on the West Coast is limited.

Over six years ago Lighthouse executed contracts with Asian customers to sell coal from the western United States. To meet this Asian demand, Lighthouse acquired a brownfield, private port facility in Longview, Washington, to increase West Coast coal port capacity. This is Millennium Bulk Terminals-Longview. Despite facing opposition to West Coast coal exports, Lighthouse Resources is committed to delivering responsibly-sourced coal to Asia because it is important for safety, national security, economic stability, and the environment.

Amid growing competition for natural resources, energy vulnerability – and aggressive ways to thwart it – are at the heart of this energy strategy and economic policy in Asia. Japan is the third largest economy in the world, yet it has an energy self-sufficiency ratio of 7.4%, meaning that it could only meet 7.4% of its power needs using its own resources.<sup>1</sup> Similarly, South Korea is the eleventh largest economy in the world, and it has a self-sufficiency ratio of 18.9%.<sup>2</sup> By comparison, the U.S. is 92.2% energy self-sufficient.<sup>3</sup> The

<sup>1</sup> Ministry of Economy, Trade and Industry, Agency for Natural Resources and Energy (2017). Japan's Energy: 20 Questions to understand the current energy situation, 2. Retrieved from

http://www.enecho.meti.go.jp/en/category/brochures/pdf/japan\_energy\_2017.pdf <sup>2</sup> Id.

<sup>&</sup>lt;sup>3</sup> Id.

stark reality is that Japan has less than one month of in-country reserves for 77% of its electricity supply at any given time.<sup>4</sup>

Japan's energy policy is built on the basic principles of safety and simultaneously improving energy security, environmental performance and reducing cost.<sup>5</sup> Securing energy resources from diverse sources, including coal, is an important part of Japan's all-the-above energy strategy.

From a Japanese perspective, coal will continue to represent 25-30% of Japan's electricity generation because it is:

- Secure Coal is abundant with greater than 200% of the reserves of oil or natural gas at current levels of production. Reserves are widely dispersed. Much of the oil and natural gas imported into Japan originates in the Middle East and must travel through the Strait of Hormuz.<sup>6</sup>
- Economic Coal has the lowest delivered fuel cost compared to oil and LNG. In Japan, coal is 1/3 the cost of LNG.<sup>7</sup>
- Reducing emissions Coal achieves reduced emissions through better technology. Average Japanese CO2 emissions from coal-fired power plants are 8% less than the world average.<sup>8</sup> Newer high efficiency, low emissions technologies are achieving even greater reductions. For example, the Isogo coal-fired power plant in Yokohama City is achieving emissions levels equal to an LNG power plant.<sup>9</sup>

Though Japan and South Korea depend upon coal imports as an important part of a balanced energy portfolio, the U.S. supplies less than 5% of these imports. Yet according to the U.S. Energy Information Administration, the U.S. leads the world with over 20 billion short tons of recoverable coal reserves – 28% of total global reserves and 50% more than Russia, which possesses the world's second largest reserves.<sup>10</sup> Increased coal exports from the United States represent an important opportunity for the U.S. in the Indo Pacific

<sup>&</sup>lt;sup>4</sup> Ezawa, M., Director, Japan's Clean Coal Division, Ministry of Economy, Trade and Industry (2017). Energy Policy and Clean Coal Technology, 5. Retrieved from

http://www.jcoal.or.jp/event/upload/22.%20Panelisti\_170906%20Energy%20Policy%20and%20Clean%20Co\_al%20Technology%28Masana%20Ezawa%29%20new.pdf

<sup>&</sup>lt;sup>5</sup> Id., 6.

<sup>&</sup>lt;sup>6</sup> Ezawa, M, Director, Japan's Clean Coal Division, Ministry of Economy, Trade and Industry (2018). Clean Coal Technology and Coal Import. Presentation in Billings, Montana, 6.

<sup>&</sup>lt;sup>7</sup> Id. at 4.

<sup>&</sup>lt;sup>8</sup> Id. at 16.

<sup>&</sup>lt;sup>9</sup> Peltier, R (2010). Top Plant: Isogo Thermal Power Station Unit 2, Yokohama, Japan. Retrieved from <u>http://www.powermag.com/top-plantisogo-thermal-power-station-unit-2-yokohama-japan/?pagenum=1</u>. See also <u>http://www.jpower.co.jp/english/company\_info/pr/ccv00000.html</u>

<sup>&</sup>lt;sup>10</sup> U.S. Energy Information Administration (2011). United States leads world in coal reserves. Retrieved from <u>https://www.eia.gov/todayinenergy/detail.php?id=2930</u>.

Region to reduce dependence on coal imports that travel through the South China Sea and provide an important alternative in the region.<sup>n</sup>

Japan is investing billions in new coal fired power generation over the next 10 years.<sup>12</sup> Many other coal-fired power plants are being built. Western U.S. coal is a preferred "designer coal" for certain high efficiency, low emission power plant designs and will aid in further reducing the environmental footprint of coal-fired power generation.<sup>13</sup>

The President's National Security Strategy released in December 2017 includes a priority action to "expand our export capacity through the continued support of private sector development of coastal terminals" in an effort to embrace an American policy for Energy Dominance and America's central position in the global energy system. Lighthouse is at the point of the supply chain where energy dominance meets energy vulnerability.

At full build-out, the Lighthouse coal terminal in Longview, Washington would receive up to 44 million metric tons of coal from multiple shippers in the West and would represent over \$2.5 billion of annual export value to countries with whom the United States has trade deficits.

Tens of thousands of U.S. direct and indirect jobs would be created or supported<sup>14</sup>, including likely jobs for the Crow Nation which is home to millions of tons of unmined coal and has an 80% unemployment rate.<sup>15</sup>

In addition, Washington's 122-page Greenhouse Gas Emissions Technical Report – prepared by Washington's own third party consultant with the environmental impact statement – found that exporting U.S. coal would have the added benefit of reducing total global greenhouse gas emissions by displacing coal mined elsewhere in the world with coal mined under more favorable U.S. mining conditions.<sup>16</sup> The effect of this displacement is equal to removing 1 million passenger vehicles from the road.

https://docs.house.gov/meetings/GO/GO28/20180717/108556/HHRG-115-GO28-Wstate-NotAfraidA-20180717.pdf.

<sup>&</sup>lt;sup>n</sup> Kuo, F. (2018). New coal war frontier emerges as China and Japan compete for energy projects in Southeast Asia. Retrieved from <u>https://www.scmp.com/comment/insight-opinion/article/2139667/new-coal-war-frontier-emerges-china-and-japan-compete-energy</u>.

<sup>&</sup>lt;sup>12</sup> U.S. Energy Information Administration (2018). Japan. Retrieved from <u>https://www.eia.gov/beta/international/analysis.php?iso=JPN</u>.

<sup>&</sup>lt;sup>13</sup> Ezawa, M, Director, Japan's Clean Coal Division, Ministry of Economy, Trade and Industry (2018). Clean Coal Technology and Coal Import. Presentation in Billings, Montana, 22.

<sup>&</sup>lt;sup>14</sup> Ernst & Young, LLP (2013). U.S. Coal Exports: National and State Economic Contributions. Retrieved from <u>http://www.uscoalexports.org/data/National-and-State-Economic-Contributions.pdf</u>

<sup>&</sup>lt;sup>15</sup> Not Afraid, A.J. (2018). Testimony of Chairman Alvin "A.J." Not Afraid, Jr., of the Crow Tribe of Indians Before the U.S. House of Representatives Committee on Oversight and Government Reform Subcommittee on the Interior, Energy, and Environment. Retrieved from

<sup>&</sup>lt;sup>16</sup> ICF (2017). Millennium Bulk Terminals-Longview SEPA Environmental Impact Statement SEPA Greenhouse Gas Emissions Technical Report, 3-35. Retrieved from <u>http://www.millenniumbulkeiswa.gov/assets/greenhouse-gas-emissions2.pdf</u>

Exporting Western U.S. coal to Asia is an important issue for our national security, jobs, economic growth, the environment and reducing the trade deficit.

If U.S. coal has limited access to the Asian market, Asia will continue its dependence on Middle East energy and secure supplies from other willing coal sellers, such as Russia. The U.S. can and should offer a better alternative.

Thank you.

## EXHIBIT A

Excerpt from Millennium Bulk Terminals-Longview SEPA Environmental Impact Statement SEPA Greenhouse Gas Emissions Technical Report, 3-35 et seq.