

Date: August 12, 2021
To: Dave Kobus, Horse Heaven Clean Energy Center
From: Spencer Cohen, PhD, High Peak Strategy LLC
Subject: Horse Heaven Clean Energy Center Economic Analysis

INTRODUCTION AND BACKGROUND

Scout Clean Energy is proposing to build and operate the Horse Heaven Clean Energy Center, a renewable energy project located in unincorporated Benton County, Washington. The project will have a generation capacity of 1,150 megawatts and include both wind and solar power facilities and battery storage systems. The first construction phase is planned for 2023 and the second phase in 2024.

In January 2021, an economic impact assessment was completed by Tetra Tech on the proposed facility, including construction and operations phases. Among its key findings were:

- Phase I construction would support a total of 458 total (direct, indirect, and induced) jobs in Benton and Franklin counties and approximately \$37.0 million in labor income, with total economic output of approximately \$70.6 million.
- Phase 2 construction would support between 472 to 539 total jobs and approximately \$37.6 million to \$41.9 million in labor income, with total economic output of approximately \$73.0 million to \$85.7 million.
- The Horse Heaven Clean Energy Center represents significant economic benefits to the community in the form of payments to farmers and landowners, local spending, and annual community investment. The project would generate almost \$20 million in property tax revenues during the first 12 months of operation and more than \$260 million over the 35-year operating life of the project. These fees will be paid to Benton County, and under current allocations, the largest proportion of those funds would support local schools.¹

The Horse Heaven Clean Energy Center has requested additional detail and interpretation of these impact estimates. Findings presented below are intended to further illustrate the local, and relatable, positive economic and community contributions of the project for residents of Benton and Franklin counties.

¹ Property tax revenues for the first 12 months of operations, summing to nearly \$20 million, is based on the first 12 months of operations for each phase of the project combined. However, these phases may not occur in the same period, but rather sequentially, with Phase 1 operations starting at the end of 2023, and Phase 2 operations at the end of 2024. According to Tetra Tech, Phase 1 will generate \$10.4 million in local property tax revenue in the first 12 months of operation, while Phase 2 will generate \$9.0 million in its first 12 months of operation (\$19.4 million in total across both phases).

COMPARISON OF DIRECT EMPLOYMENT IMPACTS

In 2020, total covered employment in Benton and Franklin counties, combined, summed to 121,200 jobs. This was down nearly 5,500 jobs compared with 2019, reflecting the overall economic downturn due to the COVID-19 pandemic. Across the two counties, the largest sectors by employment in 2020 were healthcare and social assistance, retail, administrative and waste services, and construction.

According to the January 2021 economic impact statement, each direct job in the construction sector will be associated with a total of between 2.7 (Phase 1) and 4.0 (Phase 2) jobs across the regional economy. Operations phase multipliers will range between 2.7 and 2.8.² These multipliers are equal or larger than those for other, significant sectors of the state economy, including aerospace (2.4), water transportation (2.7), crop production (1.5), and architectural, engineering, and computing services (2.2).³

Employment supported directly or through multiplier effects by Phase 1 construction would be the equivalent of more than 8% of net job loss in the region in 2020. Employment supported by Phase 2 construction (between 472 and 539 total jobs) would be the equivalent of up to 10% of net job loss in 2020.

COMPARISON OF INCOMES

The average wage across the region in 2020 was \$57,300. Assuming an additional benefits scalar of 1.25,⁴ this would yield a total estimated average labor compensation of \$71,500. In the construction sector, the estimated regional average total compensation per worker (including benefits) in 2020 was \$83,000.⁵

By comparison, during Phase 1 construction, the average income per worker will be \$113,500, nearly 60% higher than the regional cross-industry income and 37% above the construction sector average income (**Exhibit 1**). Operations phase direct incomes will range between \$88,900 and \$90,900, again well above the regional average. Total jobs supported by operations—including indirect and induced impacts—will support average incomes of between \$75,000 and \$80,800 per worker, also at or above the regional average across all sectors.

² Throughout this analysis, Phase 2 estimates are based on the average of Phase 2a and Phase 2b alternatives presented in the Tetra Tech report.

³ Washington State Office of Financial Management. *2012 Washington Input-Output Study*. January 2021. Olympia, WA.

⁴ Analysis based on comparison of total compensation and wage and salary disbursements for the Kennewick, WA MSA (representing counties of Benton and Franklin). Data source: U.S. Bureau of Economic Analysis. *Compensation of Employees by NAICS Industry [CAINC6N]*. November 17, 2020. Washington D.C.

⁵ Data sources: U.S. Bureau of Labor Statistics. *Quarterly Census of Employment and Wages*. 2021. Washington D.C.; benefits scalar of 1.25 from BEA [footnote 4].

Exhibit 1. Construction Phase Average Income per Direct Job, Compared with Economywide and Construction Sector Income, 2020 (Benton and Franklin counties combined)

Construction Phase	Average Income	As percentage...	
		Regional Average Income (All Sectors)	Regional Average Construction Income
Phase 1	\$113,500	159%	137%
Phase 2	\$114,300	160%	138%

Sources: U.S. Bureau of Labor Statistics, 2021. Scout Clean Energy, 2021; High Peak Strategy LLC, 2021.

Across all project phases, the average income per worker (wage & salary plus estimated benefits) is greater than near leading sectors of the regional (two-county) economy. The one notable exception is for “professional and technical services,” an industry that includes scientists and engineers employed as government workers and contractors tied to the Pacific Northwest National Laboratory. **Appendix A** provides a detailed breakout of average income per phase compared with estimated average income per sector in the region.

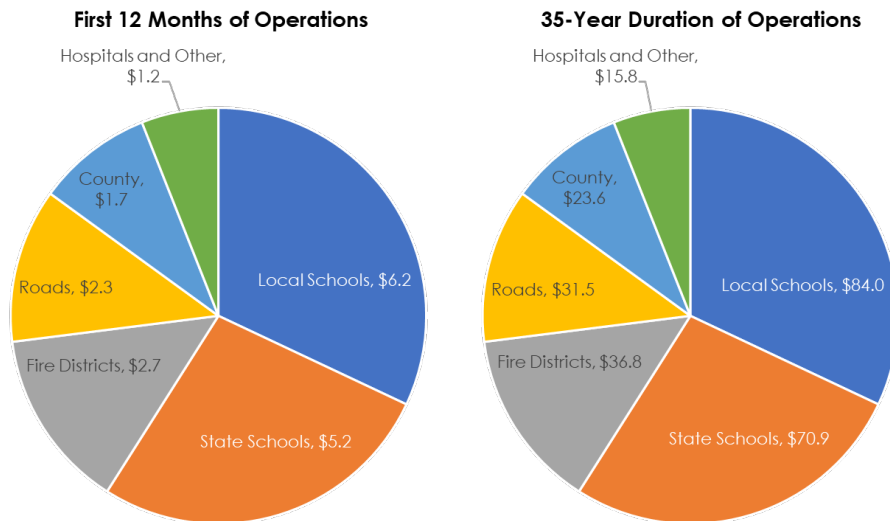
TAX IMPACTS AND GOVERNMENT SERVICES

According to the January 2021 economic impact study, the Horse Heaven Clean Energy Center will support, through direct and secondary effects, a total of \$10.4 million in local property taxes from Phase 1, and an additional \$9.0 million from Phase 2, for a total of nearly \$20 million. Over the 35-year span of the project, both phases combined would support local property taxes of \$262.2 million, including both phases (1 and 2).⁶

The largest allocation of property tax revenues would go to local school districts, followed by state schools and Fire Districts (**Exhibit 2**). During the first year of combined operations, an estimated \$11.4 million in school-related property tax revenues would be generated, of which \$6.2 million would go directly to local school districts. This amount—\$6.2 million—would be the equivalent of 74 elementary school teachers, 80 kindergarten teachers, or 68 middle school teachers, based on the average salary per occupation and estimated total compensation. Estimated number of teachers supported for each occupation is presented in **Exhibit 3** below.

⁶ Tetra Tech. *Economic Impact Assessment of the Horse Heaven Wind Farm*. Produced on behalf of Scout Clean Energy. January 2021. pp.13 and 17.

Exhibit 2. Local Property Tax Revenues, Phase 1 and Phase 2 Combined



Source: Tetra Tech, 2021.

Exhibit 3. Local Teaching Jobs that Could be Supported by Local Property Taxes from the First 12 Months of Operations for Phase 1 and Phase 2, Combined

Occupation	Jobs Supported by...		
	Phase 1 Operations, Year 1	Phase 2 Operations, Year 1	Combined Phases
Elementary School Teachers	40	34	74
Kindergarten Teachers	43	37	80
Middle School Teachers	37	31	68

Sources: Washington State Employment Security Department, 2021;⁷ High Peak Strategy LLC, 2021.
 Note: numbers should not be summed. The data above is "either...or..."

Tax revenues will also support local fire districts. In 2020, the average compensation—wage & salary disbursements plus benefits—across the two-county region for firefighters was \$93,700. Using the same analysis, the first 12 months of operations for Phase 1 and Phase 2 combined could support 67 firefighters. An estimated 6% of property tax revenues from the first 12 months of operations for Phase 1 and Phase 2 would go to "hospitals and other," or a combined total of \$1.2 million. Based on this analysis, the combined property tax revenues from the first 12 months of operation for Phase 1 and Phase 2 could support either 11 registered nurses or 11 police officers.⁸

⁷ Washington State Employment Security Department. *Occupational Employment and Wage Estimates for 2020*. March 2021. Olympia, WA.

⁸ The average regional wage for a registered nurse in 2020 was \$80,480, or an estimated \$100,600 including benefits. For police officers, the average wage was \$86,525, or \$108,200 with benefits.

Appendix A. Comparison of Project Average Compensation per Worker by Project Phase and Industry Sector Average Total Compensation per Worker, Benton and Franklin Counties (combined), 2020

Sector	Difference with Sector Average Income per Worker			
	<u>Construction</u>		<u>Operations</u>	
	Phase 1	Phase 2	Phase 1	Phase 2
Healthcare and social assistance	78%	79%	42%	39%
Retail trade	153%	155%	103%	98%
Administrative and waste services	7%	7%	-15%	-17%
Construction	37%	38%	10%	7%
Professional and technical services	-10%	-9%	-28%	-29%
Accommodation and food services	324%	326%	239%	232%
Manufacturing	63%	64%	31%	28%
Public administration	17%	18%	-6%	-8%
Wholesale trade	43%	44%	14%	12%
Finance and insurance	9%	9%	-13%	-15%
Other services, except public administration	157%	159%	106%	101%
Real estate and rental and leasing	125%	127%	80%	76%
Arts, entertainment, and recreation	354%	357%	264%	256%
Information	66%	68%	33%	30%
Educational services	128%	130%	83%	79%
Management of Companies and Enterprises	-22%	-21%	-37%	-39%
Utilities	-24%	-23%	-39%	-40%
Agriculture, forestry, fishing and hunting	N/A	N/A	N/A	N/A
All Sectors	59%	60%	27%	24%

Sources: U.S. Bureau of Labor Statistics, 2021; Scout Clean Energy, 2021; High Peak Strategy, 2021.