

1 were to identify potential transportation networks for site access and to analyze existing
2 conditions and potential traffic impacts to the area surrounding the Wild Horse Wind Power
3 Project during construction and in operation. I assisted in the preparation of the Application for
4 Site Certification for this Project.

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6 Q Would you please identify what has been marked for identification as Exhibit 32-1 (JA-1)?

7
8 A Exhibit 32-1 (JA-1) is a résumé of my educational background and employment experience.

9
10 Q Are you sponsoring any portions of the “Application for Site Certification for the Wild Horse
11 Wind Power Project?”

12
13 A Yes. I am sponsoring the following sections for which I was primarily responsible for the
14 analysis and development:

15 Section 1.6.10 Summary, Cumulative Impacts, Transportation

16 Section 3.15 Traffic and Transportation

17 Section 3.17.15 Cumulative Impacts, Transportation

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19 Q What exhibits that are part of the Application that you are sponsoring?

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21 A I am sponsoring the following exhibits to the Application:

22 Exhibit 26 Project Site Surrounding Roadway Network & Transportation Routes

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24 Q Are you familiar with these sections of the Application and Exhibits?

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A Yes.

Q Did you prepare these sections and exhibits, or, if not, did you direct and/or supervise its preparation?

A Yes, I prepared and also supervised the preparation of these sections.

Q Is the information in these sections and exhibits within your area of authority and /or expertise?

A Yes

Q Are the contents of these sections and exhibits of the Application either based upon your own knowledge, or upon evidence, such as studies and reports, as reasonably prudent persons in your field and expertise are accustomed to rely in the conduct of their affairs?

A Yes.

Q To the best of your knowledge, are the contents of these sections and exhibits of the Application true?

A Yes.

1 Q Do you incorporate the facts and content of these sections and exhibits as part of your
2 testimony?

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4 A Yes.

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6 Q Are you able to answer questions under cross examination regarding these sections and
7 exhibits?

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9 A Yes

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11 Q Do you sponsor the admission into evidence of these sections and exhibits of the
12 Application?

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14 A Yes

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16 Q Are there any modifications or corrections to be made to those portions of the Application that
17 you are sponsoring?

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19 A No.

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21 Q Would you please summarize and briefly describe the transportation study you carried
22 out, along with your conclusions and proposed mitigation if any.

1 A CH2M Hill prepared a transportation study for Wind Ridge Power Partners, LLC, to be
2 included in the application for site certification for the Wild Horse Wind Power Project. I
3 served as the lead traffic analyst.

4
5 We identified and analyzed existing transportation facilities in the area surrounding the
6 Project site, which included public county roads and state routes. We gathered existing
7 vehicle data and accident information from the Washington State Department of
8 Transportation, as well as from Kittitas County, for the surrounding road network to
9 determine the existing conditions. We also identified existing facilities pertaining to
10 alternate modes of transportation including school bus service, bicycle facilities, and
11 waterborne, rail and air traffic facilities.

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13 We identified possible access routes to the site, based on their functional classification
14 and capacity, in anticipation of large vehicles being used during construction. We then
15 worked with the Applicant's project team to determine peak hour traffic volumes
16 associated with the peak construction period. On one possible access route, we
17 anticipated 107 worker vehicles, 15 light duty delivery type vehicles, and 128
18 construction vehicles carrying materials and equipment required for construction, which
19 resulted in 250 additional construction vehicles during the peak hour. This access route
20 was assumed to carry the majority of the construction vehicles required. A second
21 possible access route is anticipated to carry just 7 heavy construction vehicles during the
22 peak hour. These construction volumes were analyzed with the volume of background
23 growth to identify impacts to the surrounding roadway network during the peak of
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1 construction. Impacts during the life of the Project were also determined, based on
2 anticipated volumes generated by the Project once in operation.

3
4 During our analysis, we identified that the roadway segment of I-90 west of the Kittitas
5 interchange would experience some degradation in traffic operations (drop from LOS A
6 to LOS B) during the peak of construction. WSDOT has communicated to Applicant that
7 they consider this impact to I-90 to be minimal. Similarly, Main Street through the town
8 of Kittitas would also experience slight degradation in traffic operations (drop from LOS
9 B to LOS C) due to construction vehicles in the peak period. The effect was considered
10 reasonable because the peak of construction would be temporary, the LOS level is
11 expected to remain at LOS C or better during peak construction and the level of service
12 of this roadway segment would return to its original status once construction is
13 completed.

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15 The Applicant will prepare a Traffic Management Plan (to be submitted to EFSEC prior
16 to construction for review) with the construction contractor outlining steps for
17 minimizing construction traffic impacts and mitigation measures which will include the
18 following measures:

- 19 • The Applicant will provide notice to adjacent landowners when construction takes
20 place to help minimize access disruptions;
- 21 • The Applicant will provide proper road signage and warnings of “Equipment on
22 Road,” “Truck Access,” or “Road Crossings;”

- 1 • When slow or oversized wide loads are being hauled, advance signage and traffic
2 diversion equipment will be used to improve traffic safety. Pilot cars will be used
3 as the WSDOT dictates, depending on load size and weight;
- 4 • The Applicant will construct necessary site access roads and an entrance driveway
5 that will be able to service truck movements of legal weight;
- 6 • The Applicant will encourage carpooling for the construction workforce to reduce
7 traffic volume;
- 8 • In consultation with Kittitas County, the Applicant will provide detour plans and
9 warning signs in advance of any traffic disturbances;
- 10 • The Applicant will employ flaggers as necessary to direct traffic when large
11 equipment is exiting or entering public roads to minimize risk of accidents;
- 12 • Where construction may occur near the roadway, one travel lane will be
13 maintained at all times.

14 Project operation and maintenance is not expected to significantly affect traffic and
15 transportation.

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17 We analyzed the cumulative impacts two additional projects (the Kittitas Valley Wind
18 Power Project and the Desert Claim Wind Power Project) would have on the surrounding
19 roadway network, assuming the very unlikely scenario of a common peak construction
20 period. We found that the only segment of roadway that could potentially be utilized by
21 all of the projects is I-90 west of Ellensburg, which is a major state route with ample
22 capacity to sustain traffic in the peak periods.

1 The Kittitas Valley Wind Power Project is anticipated to contribute approximately 169
2 construction truck trips in the directional peak hour on I-90. This volume of peak hour
3 traffic does not include worker trips because it is assumed that most workers will
4 originate from local cities such as Ellensburg or Yakima, therefore not requiring travel on
5 I-90 west of Ellensburg. The Wild Horse Wind Power Project is anticipated to contribute
6 approximately 150 construction truck trips to I-90 during the peak hour. This is a
7 directional estimate, and does not include worker trips, because, similar to Kittitas Valley
8 Wind Power Project, much of the workforce is anticipated to originate from local cities.
9 Directional peak hour construction truck volumes for the Desert Claim Wind Power
10 Project have not been calculated, but estimates from the EIS are reported as
11 approximately 130 peak hour trips. This estimate is based on the relative size of the
12 Desert Claim project compared to the Kittitas Valley and Wild Horse projects.

13
14 The total cumulative volume of construction traffic expected to travel in the directional
15 peak hour on I-90 west of Ellensburg is approximately 1,730 vehicles. This corresponds
16 to an equivalent of 14.7 passenger cars per lane mile, an operating condition that is still
17 within the numerical range for LOS B. Therefore, the added effect of the potential wind
18 power project construction traffic would not result in a significant cumulative impact on
19 the operating condition for I-90 during the construction period. Under this scenario, the
20 traffic operations are expected to degrade slightly, which is considered reasonable
21 because of the temporary nature of the construction peak, but adverse impacts are not
22 anticipated.

1 Traffic generated by the construction or operation of the Project is not anticipated to
2 affect the accident rate on roadways that are part of the Transporter Routes. Accident
3 rates are based on average daily traffic volumes, which will not be affected by Project-
4 related traffic. (Project-related traffic is a minimal addition to ADT.)
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6 Construction and operation of the Project are not expected to impact to other modes of
7 transportation.
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