EXHIBIT 20

Comments on the BLM Original and Simulation photos
for Key Observation Point 2, Highway 95 Looking Southwest

By R T Bundorf March 8, 2012

The scene presented on page 64 of Section 4 and on page 3 of Appendix E was photographed with a wide angle lens in a panoramic mode. (See the Appendix below for information on the analysis of the photo.)

The report says, "The viewshed analysis demonstrates that the northernmost portion of the project area and portions of up to 15 WTGs would be visible from KOP 2."

However, no wind generators are visible when looking at the presented photo. If it is greatly expanded, and carefully studied, one can see faint suggestions of something like towers, but their shape cannot be determined. As evidence of this lack of clarity, in Appendix E of the report, the Original and Simulation photos have been reversed. The report creators could not see the difference.

As with other photos that have been studied, this picture has much the same presentation area error. With proper presentation, the wind generators would have been readily visible.

The report states that that "this location would be approximately 3.5 miles north" of the project and that "From this section U.S.95 the project would be in view for approximately 5 miles".

Appendix

Photos taken with wide angle lenses are often difficult to fairly portray in a report that is restricted to paper or printout of a document. Wide angle lens photos may have to be printed quite large in order to be properly viewed. That problem exists with this photograph.

Any printed photograph has a proper viewing distance. For example, consider a man who is six feet tall, and is photographed 30 feet away. He was viewed and photographed at a distance 5 times his height. If, then, his image in a printed photo is 6 inches high, that photo has a proper viewing distance of 30 inches. If the image is 3 inches high, the viewing distance is 15 inches. The ratio of 5, (30 to 6), applies for this case.

It has been determined that the proper viewing distance for certain other photos printed in the BLM report is about 4 inches from the eye. It appears true for this photo, as well. Many people cannot focus at this distance, and even if they could, the quality of the photo as published does not clearly show the wind generators. A more normal viewing distance is 12 inches. For this distance, as with the others, this photo should be printed about 11 inches high and 32 inches wide.

This information was determined by photo analysis. The location of the camera position used for the photo was found, and a duplicate photo was taken at the scene. For this photo, a six foot pole was placed 30 feet from the camera. This calibrated the photo for proper viewing distance of any size print that might be made. This photo was then superpositioned on the photo from the report using Photoshop, with additional measurement using Corel Draw.

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From this photo it was determined that the composite picture height was 4.6 times the pole height in the composite picture. For a 3.9 inch high printed picture, (as occurs when the picture page is printed from the BLM Report), the pole would be 0.85 inches high and the proper viewing distance for the pole would be 5 times that, or 4.25 inches. The proper viewing distance for the entire picture is obviously the same.

For a proper view in a picture of the size in the report, only about 1/7th of the picture area should have been shown, as indicated below.

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EXHIBIT 20

Comments on the BLM Original and Simulation photos
for Key Observation Point 8, Residential Area

By R T Bundorf March 8, 2012

The scene presented on page 68 of Section 4 and on page 15 of Appendix E appears to be photographed with a wide angle lens in a panoramic mode. As has been discussed in the comments for KOP 2 and KOP 14, this presents significant presentation error.

Their description says, "The viewshed analysis (i.e. DEM) demonstrates that almost all of the project area (a panoramic view) is visible from KOP 8 and portions of up to 96 WTGs could be seen; however, the visual simulation reveals that the number of viewable WTGs would be less than 96, with the most visible WTGs appearing in the skyline of the mountainous view."

The description appears accurate, but is belied by the photograph presented. In this specific chosen location, the photograph was taken from a position that would not show the nearest wind generators that would be visible to the residents. This picture faces east. The closest ones are about 1.4 miles to the northwest and 2 miles to the southeast. The field to the northeast would certainly be blocked by the houses.

There are wind generators in the simulation picture that are visible if it is greatly expanded. But they are not seen in the picture as normally viewed in the report due to the apparent high presentation error.

Owners of the homes who have northern exposure from windows or balconies would almost certainly have nearer wind generators in view.

Had the photo been taken near the Library across the Cottonwood Cove road, several of those to the northeast would be clearly visible and large in appearance.

EXHIBIT 20

Comments on the BLM Original and Simulation photos
for Key Observation Point 14, Cottonwood Cove Looking West.

By R T Bundorf March 8, 2012

The scene presented on page 27 of Appendix E was photographed with a wide angle lens in a panoramic mode. Such photos are often difficult to fairly portray in a report that is restricted to paper or printout of a document. Wide angle lens photos may have to be printed quite large in order to be properly viewed. That problem exists with this photograph.

Any printed photograph has a proper viewing distance. For example, consider a man who is six feet tall, and is photographed 30 feet away. He was viewed and photographed at a distance 5 times his height. If, then, his image in a printed photo is 6 inches high, that photo has a proper viewing distance of 30 inches. If the image is 3 inches high, the viewing distance is 15 inches. The ratio of 5, (30 to 6), applies for this case.

It has been determined that the proper viewing distance for the photo printed in the BLM report is 4.2 inches from the eye. Many people cannot focus at this distance, and even if they could, the quality of the photo as published does not clearly show the wind generators. A more normal viewing distance is 12 inches. For this distance the photo should be printed 11 inches high and 32 inches wide.

This information was determined by photo analysis. The location of the camera position used for the photo was found, and a duplicate photo was taken at the scene. For this photo, a six foot pole was placed 30 feet from the camera. This calibrated the photo for proper viewing distance of any size print that might be made. This is the specially taken photo showing the pole at the right side.

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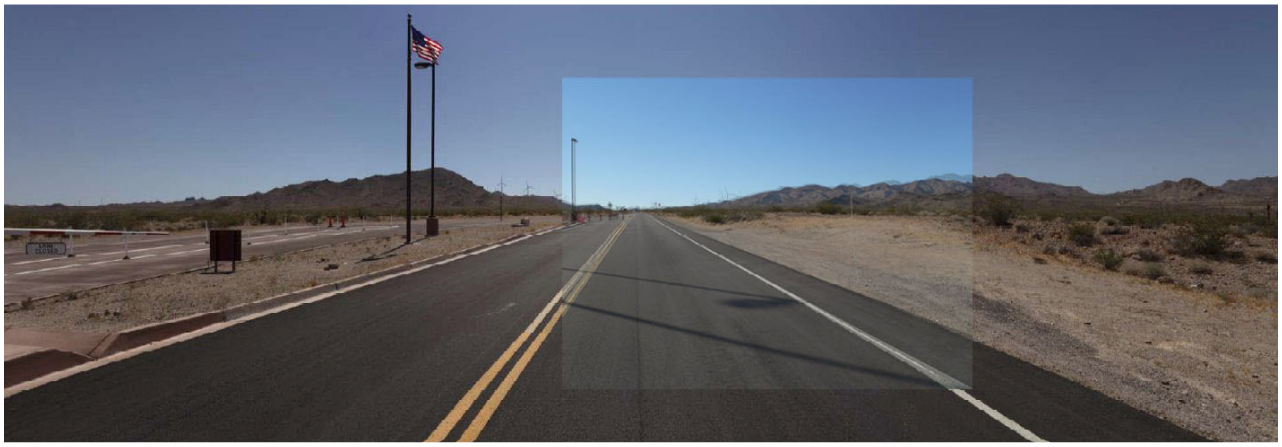
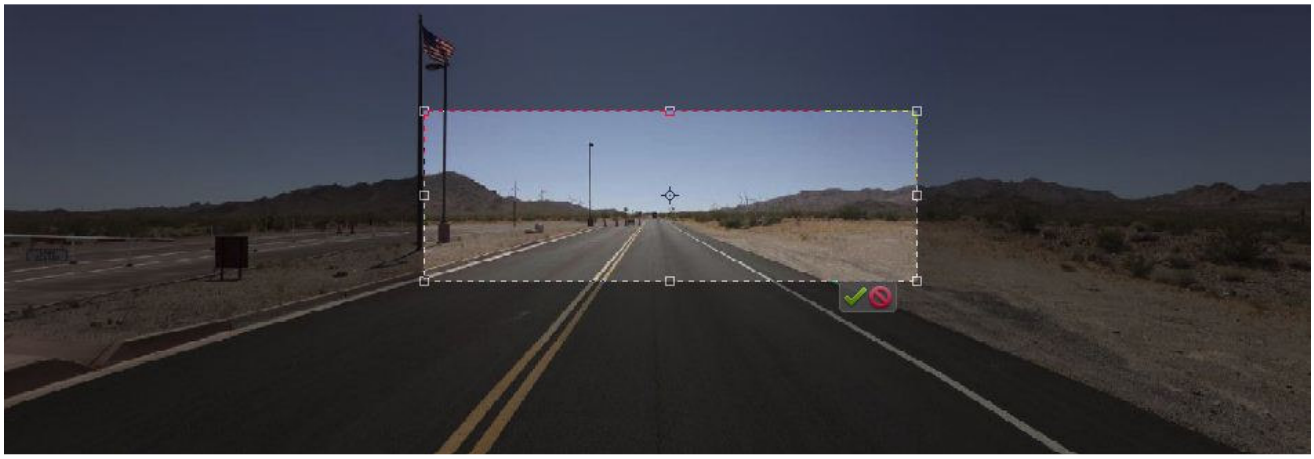
This photo was then superpositioned on the photo from the report using Photoshop, with additional measurement using Corel Draw.



From this analysis it was determined that the composite picture height was 4.65 times the pole height in the composite picture. For a 3.9 inch high printed picture, (as occurs when the picture page is printed from the BLM Report), the pole would be 0.84 inches high and the proper viewing distance for the pole would be 5 times that, or 4.2 inches. The proper viewing distance for the entire picture is obviously the same.

A picture could have been shown for viewing at a 12 inch distance from the eye. It would have been cropped to 38% as wide and 38% as high as the original. This degree of cropping is shown below.



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Had this been done, this is how it would have appeared. The images depicted within the cropped picture would have been 2.7 times larger in each dimension when printed at the same size as the original. The picture quality might have been much better and the wind generators more visible. This was the best capture available from the report.

This is the report picture. The area ratio is 7. So the overall size of the wind generators is seven times greater in the cropped picture representation.

On the next page is the correctly sized picture as it would have printed out from their report, had that been done.

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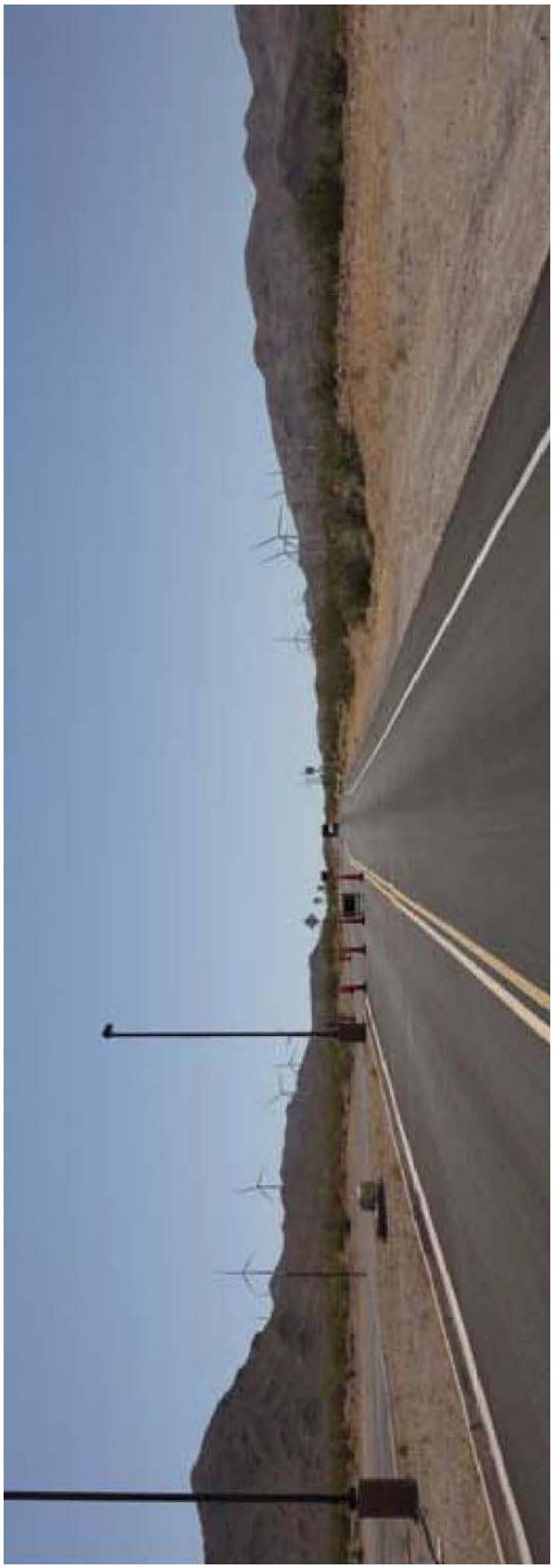

EXHIBIT 20

Comments on the BLM Original and Simulation photos
for Key Observation Point 15, Entrance Station Looking South

By R T Bundorf March 8, 2012

The scene presented on page 76 of Section 4 and on page 29 of Appendix E appears to be photographed with a wide angle lens in a panoramic mode. As has been discussed in the comments for nearby KOP 14, this can result in significant presentation error.

This photograph has been analyzed and it is apparent that a large presentation error exists, though not as great as for KOP 14.

A calibrated picture was superpositioned on the report photo as shown below. The six foot pole was located 35 feet away from the camera. The superposition of the near objects was not perfect, as the inserted picture appears to have been taken from a position further back from the roadway. However, the superposition of the important distant objects of the utility pole and hills was very good, so any possible error should be minor.

The analysis shows that the superpositioned picture height is 5.3 times the measuring pole height. The pole height in a 3.9 inch picture height would be 0.74 inches. Thus the proper viewing distance for the BLM report picture is calculated as 35/6*0.74, or 4.29 inches.

The following photo illustrates the portion of the photo that would have allowed a normal 12 inch viewing distance for a 3.9 inch high photo. The small area within the large picture, if printed about 4 inches high, would be appropriate for a report.