

**Docket Optical System - RE: 07-AFC-5 Ivanpah: Viewshed Map (Exhibit 69)**

**From:** "Jeffery Harris" <JDH@eslawfirm.com>  
**To:** "Lisa Belenky" <lbelenky@biologicaldiversity.org>, "Karen Mitchell" <kam@eslawfirm.com>, <sdeyoung@brightsourceenergy.com>, <tstewart@brightsourceenergy.com>, <jcarrier@ch2m.com>, <e-recipient@caiso.com>, <tom\_hurshman@blm.gov>, <Raymond\_Lee@ca.blm.gov>, <dfgpalm@adelphia.net>, <tgulessarian@adamsbroadwell.com>, <mjconnor@westernwatersheds.org>, <gloria.smith@sierraclub.org>, <joanne.spalding@sierraclub.org>, <gssilliman@csupomona.edu>, <devorah.ancel@sierraclub.org>, <jbasofin@defenders.org>, <atomicoadranch@netzero.net>, <ianderson@biologicaldiversity.org>, <gsuba@cnps.org>, <thansen@cnps.org>, <granite@telis.org>, <bbrizzee@cc.sbcounty.gov>, <jbyron@energy.state.ca.us>, <jboyd@energy.state.ca.us>, <pkramer@energy.state.ca.us>, <jkessler@energy.state.ca.us>, <ratliff@energy.state.ca.us>, <pao@energy.state.ca.us>, <docket@energy.state.ca.us>, "Samantha Pottenger" <sgp@eslawfirm.com>, "Greggory L. Wheatland" <glw@eslawfirm.com>  
**Date:** 1/5/2010 6:15 PM  
**Subject:** RE: 07-AFC-5 Ivanpah: Viewshed Map (Exhibit 69)

<b>DOCKET</b>	
<b>07-AFC-5</b>	
<b>DATE</b>	<u>JAN 05 2010</u>
<b>RECD.</b>	<u>JAN 06 2010</u>

Lisa,

You asked about this at the PHC. [Here's the explanation:](#)

In preparing the analytic map filed as Exhibit 69, determination of the areas from which the project would not be visible was made through a Geographic Information System (GIS) viewshed analysis using the viewshed tool in 3D Analyst, an ArcGIS extension. ESRI's ArcGIS platform is the standard GIS software package used worldwide, and its viewshed application is widely used and its results widely accepted.

This viewshed application makes use of a 10-meter digital elevation model (DEM) downloaded from the USGS seamless data distribution center. The module calculates lines of sight between each point on the land surface and the tops of the tallest project features (in this case, points established at the tops of each of the seven receiving towers) and notes whether there would be an unobstructed view toward those features).

Once the analysis is complete, the results can be used to create maps of the areas from which the project features would be visible, or conversely, the areas from which it would not be visible. In this case, the results were used to create a map that identified the areas from which no part of the project would be visible. The analysis presented in Exhibit 69 is conservative in that it is based on analysis of the potential visibility of the project's tallest elements, and considers only the effects of topographic features on the view, and does not take into effect objects above the surface that may affect visibility such as tall shrubs, trees, and manmade structures.

In summary, the areas identified on Exhibit 69 as "Area from which project is not visible" represent areas where no portion of any receiving tower would be visible, and where by implication, if these very tall elements would not be visible, the low reflector fields at ground

level around them would not be visible as well.

Cheers.

Jeffery D. Harris  
 Ellison, Schneider & Harris L.L.P.  
 2600 Capitol Avenue, Suite 400  
 Sacramento, CA 95816-5905  
 (916) 447-2166  
<mailto:jdh@eslawfirm.com>  
[www.eslawfirm.com](http://www.eslawfirm.com)

**CONFIDENTIALITY NOTICE:** This communication and any accompanying document(s) may be confidential and privileged. They are intended for the sole use of the addressee. If you receive this transmission in error, you are advised that any disclosure, copying, distribution, or the taking of any action in reliance upon the communication is strictly prohibited. Moreover, any such inadvertent disclosure shall not compromise or waive the attorney-client privilege as to this communication or otherwise. If you have received this communication in error, please contact the sender at the internet address indicated or by telephone at (916)447-2166, delete this e-mail and destroy all copies. Thank you.

---

**From:** Lisa Belenky [mailto:lbelenky@biologicaldiversity.org]  
**Sent:** Thursday, December 31, 2009 1:58 PM  
**To:** Karen Mitchell; sdeyoung@brightsourceenergy.com; tstewart@brightsourceenergy.com; jcarrier@ch2m.com; Jeffery Harris; e-recipient@caiso.com; tom\_hurshman@blm.gov; Raymond\_Lee@ca.blm.gov; dfgpalm@adelphia.net; tgulesserian@adamsbroadwell.com; mjconnor@westernwatersheds.org; gloria.smith@sierraclub.org; joanne.spalding@sierraclub.org; gssilliman@csupomona.edu; devorah.ancel@sierraclub.org; jbasofin@defenders.org; atomictoadranch@netzero.net; ianderson@biologicaldiversity.org; gsuba@cnps.org; thansen@cnps.org; granite@telis.org; bbriizee@cc.sbcounty.gov; jbyron@energy.state.ca.us; jboyd@energy.state.ca.us; pkramer@energy.state.ca.us; jkessler@energy.state.ca.us; ratliff@energy.state.ca.us; pao@energy.state.ca.us; docket@energy.state.ca.us; Samantha Pottenger; Gregory L. Wheatland  
**Subject:** RE: 07-AFC-5 Ivanpah: Viewshed Map (Exhibit 69)

Karen, Thank you for the map. I has also asked if whoever prepared the map could state what is meant by "Area from which project not visible" in the map's legend. That is, does this mean the surface of the valley is not visible, the mirrors would not be visible, and/or the towers would not be visible?  
 If you could clarify that as well I would appreciate it. Have a great New Year. Lisa

Lisa T. Belenky, Senior Attorney  
 Center for Biological Diversity  
 351 California St., Suite 600  
 San Francisco, CA94104  
 Phone: 415-436-9682 x 307  
 Direct: 415-632-5307  
 Cell: 415-385-5694  
 Fax: 415-436-9683  
[lbelenky@biologicaldiversity.org](mailto:lbelenky@biologicaldiversity.org)

This e-mail message is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited by law. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

Please consider the impacts on the environment before printing this email.

---

**From:** Karen Mitchell [mailto:kam@eslawfirm.com]

**Sent:** Thursday, December 31, 2009 12:03 PM

**To:** sdeyoung@brightsourceenergy.com; tstewart@brightsourceenergy.com; jcarrier@ch2m.com; Jeffery Harris; e-recipient@caiso.com; tom\_hurshman@blm.gov; Raymond\_Lee@ca.blm.gov; dfgpalm@adelphia.net; tgulesserian@adamsbroadwell.com; mjconnor@westernwatersheds.org; gloria.smith@sierraclub.org; joanne.spalding@sierraclub.org; gssilliman@csupomona.edu; devorah.ancel@sierraclub.org; jbasofin@defenders.org; atomicoadranch@netzero.net; lbelenky@biologicaldiversity.org; ianderson@biologicaldiversity.org; gsuba@cnps.org; thansen@cnps.org; granite@telis.org; bbrizzee@cc.sbcounty.gov; jbyron@energy.state.ca.us; jboyd@energy.state.ca.us; pkramer@energy.state.ca.us; jkessler@energy.state.ca.us; ratliff@energy.state.ca.us; pao@energy.state.ca.us; docket@energy.state.ca.us; Samantha Pottenger; Gregory L. Wheatland

**Subject:** 07-AFC-5 Ivanpah: Viewshed Map (Exhibit 69)

Dear Parties:

The attached pdf file is the electronic version of the Ivanpah SEGS viewshed map that was distributed at the hearing on Monday, December 14 and docketed as Exhibit 69.

This map is the same as the one distributed at the hearing, with the minor difference that some of the KOP numbers have been changed to be consistent with the KOP numbers that had been hand-corrected on the maps distributed at the hearing. These hand corrections were necessary because when the map was prepared, it used the KOP numbers that CH2M HILL had initially assigned to KOPs 5 through 10. Because these numbers were different from the numbers the CEC's visual resources consultant had assigned to these KOPs in the FSA analysis, to avoid confusion, we crossed out our original KOP numbers and wrote in the numbers that the CEC's visual resources consultant had used. In this electronic version of the map, the KOP numbers that had been hand-corrected in the map distributed at the hearing now read as the corrected numbers that are consistent with the KOP numbers used in the FSA (i.e., the CEC's numbering system).

*Karen A. Mitchell, Paralegal  
Ellison, Schneider & Harris L.L.P.  
2600 Capitol Avenue, Suite 400  
Sacramento, CA 95816-5931  
(916) 447-2166 phone  
(916) 447-3512 fax*