Organizations

this source of income and economic activity must be accounted for in the Final EIS and any supplemental DEIS.

Growth in the professional and service sector is also tied to the natural and other amenities in the area. Protected public lands in the region enhance the West's attractiveness for both skilled workers and employers. Protected public lands provide indirect support for local and regional economies, a fact that is increasingly being recognized by communities throughout the West. These lands provide a scenic backdrop, recreation opportunities and a desirable rural lifestyle, and many other tangible and intangible amenities that attract new residents, businesses and income to the rural West. Many businesses are able to conduct national or international commerce from any location they choose. Other entrepreneurs simply choose to live in a particular place and build businesses in response to local needs. Research conducted by The Center for the Study of Rural America, at the Federal Reserve Bank of Kansas City (the Rural Center) has found that entrepreneurship is a strong indicator of rural economic health (Low 2004, Low et al. 2005, Thompson et al. 2006). The Rural Center has included entrepreneurship along with several other indicators of rural economic potential into a set of Regional Asset Indicators (Center for the Study of Rural America 2006a). These indicators include the natural and human amenities of a region – many of which are closely tied with undeveloped public lands (Weiler 2004).

IMPLAN is the accepted standard for NEPA analysis. The set of amenities available to potential amenity in-migrants is not judged to have changed substantially as a result of this project. Section 4.12-Socioeconomic Impacts has been updated to include potential effects on recreation and tourism. For further information see the newly added ppendi x F: Literature Review of Socioeconomic Effects of Wind Project and Transmission Lines.

Nevada and Clark County both have levels of human and natural amenities which are higher than the national average due in part to protected and undeveloped public lands. This is even more true near Searchlight, where the vast majority of public lands in the vicinity of the town carry some sort of protected status. The role of these lands in these areas' economy and the potential impact of project and associated generation development must be addressed in the Final EIS and any supplemental DEIS.

Section 4.12-Socioeconomic Impacts has been updated to include potential effects on property values.

Research into what motivates entrepreneurs and businesses to choose particular locations consistently finds that amenities and quality of life top the list (Rasker and Hansen 2000, Snepenger et al. 1995, Rasker and Glick 1994, Whitelaw and Niemi 1989). Developing the proposed energy transmission project on undeveloped public lands may hinder the impacted communities' ability to attract more small businesses into the region to further enhance this sector.

These findings together point to the value of public lands to strong local economies. The impacts of development of the proposed project on these lands must be addressed in the Final EIS. To site generation and transmission, even for renewable energy development, in a way that impairs these natural amenities would be short-sighted at best. The Final EIS and any supplemental DEIS should address this issue and provide detailed criteria to protect the economic benefits associated with undeveloped public lands.

The socioeconomic analysis in the Final EIS must also adequately address the potential impacts on the quality of life for residents of communities that will be impacted by the transmission development. The quality of life in many communities with abundant protected public lands is often tied inextricably with those lands. Any negative impacts on these lands from

transmission development may deteriorate aspects of the western quality of life. As discussed above, such a decline will create more than simply emotional or psychological impacts. Areas with high quality of life are better able to attract the entrepreneurs, skilled and creative workers, retirees and others who are important economic drivers of many western communities.

This development will also likely have impacts on local private property values due to the loss of local open space. There is a large body of work which looks at the positive impacts of open space and protected public lands on property values.[19] These studies can be applied to infer the inverse decline in property values associated with the loss of protected public lands and open spaces that may occur when energy transmission facilities are sited on such lands. Numerous studies show that there is a positive correlation between property values and open spaces and protected public lands. McConnell and Walls (2005) provide a good overview of both property values and non-use values associated with open spaces. All of these studies provide empirical evidence of the potential losses to western citizens from the conversion of open space to industrial use. Given that the proposed energy transmission development will impact public land and open space throughout the area, it is likely to have negative impacts on the property values in the region. It is especially important to estimate this impact on landowners who are not being compensated for direct use of their property.

Section 4.12-Socioeconomic Impacts has been updated to include Impacts on Property Values. A literature review on property value impacts has been added in ppendi x F: Literature Review of Socioeconomic Effects of Wind Project and Transmission Lines.

BLM must include a thorough examination of the full socioeconomic impacts likely to occur if the proposed energy transmission project impacts undeveloped lands. Suggested analyses and sources of data can be found in *"Socio-Economic Framework for Public Land Management Planning: Indicators for the West's Economy"* on the enclosed CD-ROM

Although the BLM has reviewed the document provided, IMPLAN is the current accepted standard for NEPA analysis.

The Final EIS and any supplemental DEIS must also include an assessment of impacts on the local quality of life that are may result from the development of energy transmission on surrounding public lands. The potential resulting economic impacts of any decline in quality of life must also be assessed in order to fully evaluate the proposed development.

"Quality of life" is composed of many elements including noise, visual, recreation etc., all of which are discussed throughout Chapter 4.0-Environmental Consequences

The Final EIS and any supplemental DEIS should include a quantitative analysis of the impacts on residential property values due to the loss of open space and undeveloped public lands from the development of the proposed energy transmission and associated generation.

4. The DEIS economic analysis failed to account for non-market costs and benefits.

One of the most important purposes of public lands, including those administered by the Bureau of Land Management, is the provision of public goods or non-market goods. Opportunities for solitude, outdoor recreation, clean air, clean water, the preservation of

[19] Several examples of studies of the impact of open space on property values include Earnhart (2006), Bengochea Morancho (2003), Espey and Owosu-Edusei (2001), Bolitzer and Netusil (2000), Lutzenhiser and Netusil (2001), Geoghegan et al. (2003), Geoghegan (2002), Acharya and Bennett (2001), Irwin (2002), Tajima (2003), Luttik (2000), Loomis et al. (2004) and Breffle et al. (1998).

wilderness and other undeveloped areas would be underprovided if left entirely to market forces. The proposed generation and transmission project will most certainly have an impact on the level of non-market benefits associated with the Piute-El Dorado ACEC, the Lake Mead NRA, and other protected and lands possessing opportunities for solitude and quiet recreation in the vicinity of Searchlight.

The assessment of the socioeconomic impacts in the FEIS and in any supplemental DEIS for the proposed project must account for the non-market values associated with undeveloped wild lands. The BLM has an inherent responsibility to see that these lands are not impaired in order to ensure that the public goods they produce continue to be provided and in quantities that meet the demand of all U.S. citizens.

Non-market values have been measured and quantified for decades. There is a well-established body of economic research on the measurement of non-market values, and the physical changes (which result in decreases in the source of these values) brought about by development are very easy to measure quantitatively.

This analysis is especially important when considering actions which would degrade or damage undeveloped lands since these lands produce benefits and values that are seldom captured in the existing market structure. The literature on the benefits of wilderness and other undeveloped lands is well-established and should be used by BLM to estimate the potential value of these lands where the project is proposed and the surrounding areas that will be affected by the project. Krutilla (1967) provides a seminal paper on the valuation of wilderness and has led the way for countless others who have done additional research all providing compelling evidence that these lands are worth much more in their protected state. Morton (1999), Bowker et al. (2005), Krieger (2001) and Loomis and Richardson (2000) provide overviews of the market and non-market, use and non-use values of wilderness and wildlands. See Walsh et al. (1984), Bishop and Welsh (1992), Gowdy (1997), Cordell et al. (1998), Loomis and Richardson (2001) and Payne et al. (1992) for several more examples.

Peer-reviewed methods for quantifying both the non-market and market costs of changing environmental quality have been developed by economists and are readily applicable to solar energy development. For a catalog of these methods see Freeman (2003). For a complete socioeconomic analysis, BLM should adapt these methods to conditions in the impacted areas to obtain a complete estimate of the economic consequences of the proposed transmission development.

BLM must measure and account for changes in non-market values associated with the proposed energy development. To do otherwise omits a very important socioeconomic impact that would directly result from this development. The analysis must assess the non-market economic impacts to all Americans, including the passive use values of undeveloped public lands.

5. The DEIS relies entirely on economic base models to predict economic impacts.

The use of economic base models such as IMPLAN in Section 4.12 (socioeconomic impacts) is insufficient to predict future economic impacts from the development of industrial-scale energy generation and transmission facilities. While these models can be useful as a tool to develop static analyses of the regional economy, the BLM and local communities potentially impacted must be aware of the shortcomings and poor track record of such models as predictive tools. Economic base models do not consider the impacts of many important variables that affect regional growth in many rural communities, especially in the West. Attributes such as natural amenities, high quality hunting, fishing and recreational opportunities, open space, scenic beauty, clean air and clean water, a sense of community, and overall high quality of life are not measured or accounted for in economic base models, however these amenities are associated with attracting new businesses and migrants as well as retaining long-time residents. For example, many residents of rural Nevada communities (both long-time and new) earn retirement and investment income, and while it is technically possible, most economic base models completely fail to consider the important economic role of retirement and investment income.

IMPLAN is the accepted standard for NEPA analysis.

Many economists have offered constructive critiques of the such models. See for example: Krikelas (1991), Tiebout (1956), Haynes and Horne (1997), Hoekstra, et al. (1990), Richardson, 1985 and the Office of Technology Assessment (1992). The ease of data acquisition for estimating the impacts of manufacturing, construction and resource extractive sectors combined with the difficulty of estimating the impacts of recreation and tourism underscores the potential bias favoring development in economic base models. The concern over the accuracy of these models combined with concern over the use of such models for planning, suggests that it is not only inappropriate but a disservice to rural communities to rely on economic base analyses to estimate the economic impacts of public land management on rural communities.

The estimated effects of the one-time payment to landowners should not be included with the effects estimated for project employment. The Final EIS and any supplemental DEIS should show exactly what the multipliers being used are and should separate these two effects for all alternatives and the common impacts (the same transparency is necessary for the income effects). Furthermore, this analysis of employment and income does not consider the potential adverse impacts on other local businesses and industries (such as recreation and tourism) which will likely be impacted by the construction and operation of the project.

The proposed project does not have a provision for a one-time payment to landowners. Tourism and recreation businesses are included in the IMPLAN model.

The analysis performed for the Final EIS must not rely solely on IMPLAN or on other models derived from economic base theory to predict the economic impacts of energy transmission development. When such analysis is used, the impacts on other economic sectors (recreation and tourism especially) must also be analyzed, and these changes should be presented to show net gains/losses due to the proposed development.

As we have discussed above, the relationship between public land management and local and regional economic prosperity and growth is far more complex than these models assume, and given the potentially significant impacts on many of the region's public lands, use of such

models in the DEIS has resulted in an incomplete and inadequate analysis of the socioeconomic impacts.

Furthermore, where IMPLAN is used to project income and employment effects all multipliers and all assumptions used to derive them must be provided for review.

H. The DEIS fails to adequately evaluate impacts to cultural and archeological resources, including impacts of development on sacred sites.

The DEIS states that the cultural report is "in progress." DEIS at 1-15. Accordingly, the DEIS fails to present relevant information about the utility-scale wind project's impacts to cultural resources. The DEIS makes clear that the area within which the project would be built has spiritual significance to several tribes, DEIS at 3-36, and in particular that Spirit Mountain, about 10 miles south of the project site, has special significance to the Yuman tribes. The project is in the viewshed of Spirit Mountain. The area also has spiritual significance for the Colorado River Indian Tribes (Mohave, Chemehuevi, Hopi and Navajo). Spirit Mountain was added to the National Register of Historic Places in 1999. The mountain, considered the beginning of creation, is so sacred to Indian tribes in Nevada, California, Arizona and Mexico that background from its application for the national listing is not available to the public, even through a Freedom of Information Act request.

However, the DEIS does not disclose how the project will affect these cultural resources. DEIS at 4-38 to 4-40. The DEIS has not demonstrated that BLM has complied with Section 106 of the National Historic Preservation Act ("NHPA"), 16 U.S.C. § 470(f), and related regulations, 36 C.F.R. §§ 800 *et seq*.

The purpose of the NHPA is to preserve the history and prehistory of this country and protect for future generations the historical and cultural resources that are part of the Nation's heritage. Section 106 requires federal agencies to consider the impact of their "undertakings" on historical properties:

> Section 106 of NHPA is a "stop, look, and listen" provision that requires each federal agency to consider the effects of its programs. . . . Under NHPA, a federal agency must make a reasonable and good faith effort to identify historic properties; determine whether identified properties are eligible for listing on the National Register based on criteria in 36 C.F.R. § 60.4; assess the effects of the undertaking on any eligible historic properties found; determine whether the effect will be adverse; and avoid or mitigate any adverse effects.

Muckleshoot Indian Tribe, 177 F.3d at 805.

The existing documentation provides no evidence that BLM complied with Section 106. There is no indication that BLM adequately consulted with members of the interested public, including potentially affected tribes or tribal members. *See* 36 C.F.R. § 800.4(a) (requiring BLM to "determine and document the area of potential effects, as defined in [36 C.F.R.] § 800.16(d),"

The cultural resources report has been completed and Native American consultation has been conducted. The results of the cultural inventory and tribal comments are summarized in the Final EIS. Views from Spirit Mountain and impacts are discussed in Section 3.9-Visual Resources 4.9-Visual Resource Impacts, and Section 5.2.5-Native American Consultation.

identify historic properties, and to affirmatively seek out information from the State Historic Preservation Officer, Native American tribes, consulting parties, and other individuals and organizations likely to have information or concerns about the project's potential effects on cultural properties). BLM should comply with the requirements of the NHPA and disclose information about effects on cultural resources to the public.

To adequately address impacts to cultural resources, and comply with the NHPA and NEPA, BLM must evaluate (in its NEPA document) how the project will impact significant cultural and traditional landscapes of the Chemehuevi and other tribes. Will the remaining five sites identified as NHPA-eligible be evaluated prior to any construction taking place? DEIS at 3-35. Elders from the Mohave and Chemehuevi Tribes have stated to us that they have not had the opportunity to walk the proposed project site to identify cultural resources. Both are in agreement that there are ancient trails transecting the site. Have these trails been identified? Further investigation and mapping of trails and prehistoric sites in the area should be performed. A regional assessment of trail systems, archaeological sites, sacred sites, viewsheds to sacred landmarks such as Spirit Mountain should be undertaken. Oral histories of local tribal members should be recorded to gain an understanding of the impacts of the industrial-scale wind project to an area which is significant to them. More outreach to the Colorado River Indian Tribes needs to be done, to insure that sacred, historical and unmapped archeological sites are not damaged or destroyed.

The DEIS states ". . . Five sites identified as NRHP eligible are located within proposed road routes or tower locations and may receive direct impacts from project related construction activities." DEIS at 3-26. Will the proposed roads or turbines be relocated to prevent destruction of these sites? If not, why not? Is the history of the region that unimportant to the applicant, which has no ties to the southern Nevada area?

I. The DEIS fails to give adequate consideration to likely impacts to water resources.

The DEIS provides little concrete information about the impacts to water resources. Why has BLM not provided an estimate of the *total* amount of water that would be used by this project? Some of the estimates that appear in the DEIS seem to be related to other similar projects, not estimates directly from Duke applicable to the needs of this project.

In describing the features common to both action alternatives, the DEIS states the water will come from the Searchlight Municipal Water System. DEIS at 2-27. Where are the fire hydrants that the contractor will use? These are not identified in the DEIS. How will traffic to the water hydrant(s) be controlled? Will this public water system be over-drawn by the contractor's use of water? What guarantee is there that using this amount of water won't result in the town being short of water? BLM must disclose whether the *actual* projected use of water for this project will cause water shortages for the citizens of Searchlight.

The project would take its water from the Searchlight Water System "or another existing water right in the Searchlight area." DEIS at 4-15. However, it appears that the water rights to

The sites are evaluated in more detail in the cultural resources report. The Class III cultural resources survey was conducted within the Area of Project Effect (APE), currently defined as the potential disturbance area plus a 200-ft. buffer around all new and existing access roads, transmission lines and project facilities. Most of the sites found in the project area relate to historic mining activities that took place in the early 20th Century. Only six sites were prehistoric with seven being primarily historic mining sites with one prehistoric artifact or feature. No physical trails were located during the cultural resources investigations or reported by the Tribes consulted. A Memorandum of Agreement (MOA) between the BLM and the Nevada State Historic Preservation Office will address mitigation measures. Consultations between the BLM and the tribes began in 2009 and have continued through the NEPA process. Comments received are summarized in the Final EIS. An ethnographic/ethnohistoric study is a mitigation measure (MM CR-2).

Section 4.3.2.2-Proposed Action – 96 WTG Layout Alternative and Section 4.3.2.3-87 WTG Layout Alternative have been updated to include water usage estimates for construction of the wind facility. Western will estimate the actual water demand during the ensuing phases of the NEPA process.

In the event that SWS will provide the water for this project, SWS staff will determine the actual source connection. SWS technical staff will determine the volume and rate of water that can be provided to this project. As with most other water rights holders, SWS cannot exceed its duty.

In addition to SWS resources, there are approximately 620 acre-feet of existing rights, of which 311 are quasi-Municipal. The Applicant will coordinate with the Las Vegas Valley Water District to support the water needs for the project. If sufficient resources are not available, the Applicant will procure water from local willing sellers

groundwater may not be readily available. DEIS at 3-16. BLM has not disclosed the total amount of water the project will need, or whether it will be possible to obtain the rights to such water. BLM should disclose information about Duke's proposed water rights purchases and transfer applications for public review. Without accurate information about the potential to obtain rights to the needed water (or accurate information about the amount of water needed), BLM cannot make a non-arbitrary decision to approve the ROWs for the project.

The DEIS notes that there are several private wells within the project area. DEIS at 3-15. What effect might the blasting have on these wells? People who have residences in this area and have installed private wells have spent a great deal of money to develop the wells on their property. Will Duke compensate residents whose wells are damaged or destroyed by the blasting? In addition, the DEIS notes that the springs listed are an important source of water and habitat for wildlife. *Id.* One laydown area and a substation are shown directly across Cottonwood Cove Road from Boat Tank Spring. What effect will the construction phase, and the long-term operation of the project, have on the wildlife that is dependent on this spring? Why are the aforementioned structures placed in such close proximity to a spring that is vital to survival of the areas wildlife? What mitigation will BLM require to protect the spring?

Assuming that the contractor will get water for the project from the Searchlight Water System/Las Vegas Valley Water District, how will this affect the quantity of water available for the residents of Searchlight over the long term? *See* DEIS 3-15. Water is at a premium throughout southern Nevada. What is the probability that the use of water required to build this project; i.e., dust control, concrete mixing, etc., would leave Searchlight Water System without enough water to provide for its residents?? Water levels in the community well at the nearby town of Cal-Nev-Ari have dropped dramatically in recent years. There has not been enough precipitation in the area to recharge the aquifer. As noted in Paragraph 3.3.2.5, the committed water resources in the region are many times greater than the rate of recharge.

In terms of the impacts to water resources, the DEIS provides no concrete information about the overall projected water usage or its actual likely impacts to local water users. Rather, it makes only improper, general statements about impacts. For example, the DEIS states "The Proposed Action *would* affect water resources *if* it . . . Decreases groundwater supply . . ." DEIS at 4-14 (emphasis added). This is not speculative: there is a high likelihood this would occur. Not only would there be heavy water usage for construction and dust mitigation, but continued water use as the many miles of road will require ongoing maintenance and dust control. BLM must quantify the amount of water that would be used, and then evaluate what that will do to other water users in the area. In addition, will water be used to control dust on the areas stripped of vegetation for fire breaks? Once the natural vegetation is stripped, the area will become a prime area for infestation of non-native plants and noxious weeds. The only logical conclusion that BLM can arrive at to preserve the existing ecology of the area, as well as preserve the rights of the people who live in the area to have access to an adequate supply of potable water, is to adopt the "no action" alternative. DEIS at 4-14.

At page 4-15, the DEIS states that approximately 30 acre feet of water would be used for dust control, concrete mixing, etc. Will this over-draw the Searchlight Water System? According

Refer to Section 3.3.2.4-Groundwater Resources for the proximity of wells to the project area. Considering the distance from the construction site to the wells, the engineered blasting should have no effect. Liability clauses will be in place for the unlikely event that there is damage to personal property. All construction methods must meet Clark County codes. The materials laydown yard location is proposed for the west-central portion of the site, along with east end of the access road. This is not near the Boat Tank Spring. The construction area footprint does not encroach on any of the 5 springs identified within the project area. There is, however, a mining operation in the vicinity of Boat Tank Spring.

Ultimately, it's the responsibility of the State Water Engineer when issuing the municipal rights to ensure that it won't deplete the aquifer. It's the responsibility of SWS and/or LVVWD to put their rights to beneficial use, which in the case of municipal supply is to sell it.

The firebreaks will need to be stabilized, either with water or some other approved method. Once stabilized, the firebreaks should no longer require watering, as no vehicle traffic is expected that would break the crust. Section 4.3.2.2-Proposed Action – 96 WTG Layout Alternative and Section 4.3.2.3-87 WTG Layout Alternative have been updated to include water usage estimates for construction of the wind facility.

The DWR estimates a perennial yield of 300 acre-feet for Piute Valley. Unfortunately, DWR does not have a current pump inventory for any of the three basins in which the project is located. Based on Mr. Bundorf's estimate, SWS pumped slightly over half of the perennial yield last year. The available amount of water in Piute Valley may depend on the volume of water utilized by other rights holders in the valley (private residences, mining and quasi-municipal users). As with most other water rights holders, SWS cannot exceed its duty.

to Jordan Bunker of the Las Vegas Valley Water District (LVVWD), the town of Searchlight pumped about 55,500,000 gallons of water—170 acre feet—in 2011 (J. Bundorf personal communication Apr. 9, 2012). What guarantees are there that the water needs for the project won't result in a shortage of water for the town? Where is the analysis to demonstrate that? In addition, controlling dust in arid environments is very difficult. Given the dry climate and dusty soils in this area, it is likely that the 30 acre feet estimate will be exceeded. The DEIS should provide more information on the source of the water and the reasons that it assumes this estimate is valid.

One acre foot equals about 325,851 gallons. Assuming that an average Searchlight household uses 5,000 gallons per month, an acre foot would supply a family for five and one-half years. The (at least) 30 acre feet for construction and dust control is an excessive draw on the local water supply, and a waste of water in this arid environment, for a project that essentially has no benefit to the people in the immediate area of the project.

The DEIS states that this usage would not impact groundwater recharge, but lacks a basis for doing so because the DEIS provides no baseline estimating total available water resources in the area, but rather only the amount of groundwater resources that have been committed or appropriated. In general, recharge is much slower than the rate of draw down occurring in the Searchlight wells. Have studies been done to carbon date the water in the SWS wells, thus providing an estimate of recharge rate? If not, BLM should require Duke such a study performed, and disclose it to the public, to ensure that the 30 acre feet for construction, and another 30 acre feet for decommissioning, would not deplete the Searchlight water supply, and that of the town of Cal-Nev-Ari.

J. The DEIS fails to adequately evaluate noise impacts.

DEIS sections 3.10 and 4.10, covering noise, do not fully disclose or evaluate the likely noise impacts from the project. Densely written in technical jargon, they also do not comply with BLM's obligation under NEPA that an EIS "shall be written in plain language … so that decision makers and the public can readily understand them." 40 C.F.R. § 1502.8. As described in detail above, they omit crucial baseline and effects information and analysis regarding noise impacts to desert tortoises, bighorn sheep, birds, and recreationists, and on nearby protected areas. In a supplemental DEIS, please disclose and evaluate the effects of noise to recreational users who would be hiking and camping in the Searchlight Mountains, as well as the noise impacts to desert tortoises, bighorn sheep, and other wildlife and birds that would use this area.

While the data presented appears to be impressive, *e.g.* DEIS at 3-80, other countries have been studying noise emitted by WTGs for longer than the U.S. It has been determined that the types of noise and vibration created by wind turbines is unique. It is not only annoying but actually has serious negative effects on the health of nearby residents, and cannot be measured with traditional methods of measurement.

BLM and Duke need to research and incorporate data from studies done within the past two years that apply specifically to industrial scale wind turbines. The mere fact that Duke

LVVWD has rights for 4358 acre-feet of water. Based on the commenter's assumptions, SWS could provide water for 23,666 families per year, which is significantly greater than the current population. As with most other water rights holders, SWS cannot exceed its duty.

Refer to Section 3.3.2.4-Groundwater Resources for a description of Piute Valley recharge. Recharge occurs either via vertical percolation or via lateral flow from upgradient sources. The legal baseline for estimating impacts to an aquifer is the recorded Perennial Yield, which for Piute Valley is 300 acre-feet. An estimated 160 acres will be finished with impermeable materials; cement, asphalt and/or buildings. The estimated reduction of permeable surfaces across the 18,949 acres development would be less than 1%. The relative "age" of groundwater cannot be determined via carbon dating. An aquifer's water quality is predominantly determined by the media type, temperature and contact time. The higher the concentrations, typically, the older the water. This method, however, cannot accurately quantify the "age". The relatively low concentration of ions in the Piute Valley alluvial aquifer, in which the SWS wells are screened, indicates that the residence time of the water is relatively brief.

Section 3.10-Noise and 4.10-Noise Impacts has been clarified to the extent possible. Section 4.4.4-Wildlife has been updated to include the impacts of noise on wildlife.

Comment noted. The modeling study conducted for this project is the accepted standard for NEPA analysis. Refer to Section 4.10.2-Direct and Indirect Effects by Alternative for the explanation of conservative assumptions that were used in the noise modeling analysis.

requested, and Clark County granted, a variance to increase the allowable noise level for the project area by sixteen percent (16%) indicates that applicant knows that wind turbines create noise that will affect the local environment.

Duke has been operating industrial wind energy facilities in Wyoming and Texas. Is data available from those locations on actual noise levels? Have complaints been lodged by people living near those wind projects? Applicant should provide this data to BLM and the citizens of Searchlight, and BLM should disclose these impacts as part of the NEPA process. Furthermore, articles and studies are available where residents living near wind energy facilities alternately describe the effect as "living next to a jet engine that revs up but never takes off"; or "sounds of thumping like tennis shoes in a clothes dryer"; and also described as a throbbing in head and chest from sounds and vibrations that are inaudible but felt throughout their body (infrasound). Please provide "plain language" disclosures of these impacts in the NEPA document.

Meanwhile, Duke's representative at the public information meetings, Mr. Robert Charlebois, characterized noise from wind turbines as "sounds like raindrops falling on leaves" or "sounds like your refrigerator running." Both comments are obviously meant to deceive those people whose communities will be forever altered by Duke Energy's plans, and whose quiet enjoyment of their rural lifestyle can never be recovered.

The "Region of Influence" studied was within two miles of private property. DEIS at 3-79. Some of the residences are only one-quarter mile from the turbines. These residences will, no doubt, not be fit for human habitation due to noise if this project is built. Additionally, studies have shown that under certain atmospheric conditions, noise from WTGs can be heard for 15 kilometers (approximately nine miles). This range would include Lake Mead National Recreation Area at Cottonwood Cove; the Spirit Mountain Wilderness Area; and all of the communities of Searchlight and Cal-Nev-Ari.

"[T]he Lake Mead NRA has proposed that noise levels from adjacent wind [projects] to not exceed L_{eq} level of 35 dBA during nighttime hours on park lands." DEIS at 3-81. Is this lower sound level guaranteed at night? Will applicant be required to shut down the turbines at night if this level cannot be achieved? In other communities, turbine operators have voluntarily done this to comply with noise statutes. As mentioned above, studies have shown that nighttime noise levels can be up to 15 decibels higher than daytime levels, yet the 35 dBA contours for both action alternatives already stretch up to or over the Lake Mead NRA border. It is likely that nighttime noise levels will exceed the threshold required by the National Park Service to maintain intact the current soundscape within the Lake Mead NRA—particularly given the prevailing winds from the south and southwest that will tend to propagate noise from the project site towards the NRA. Revised POD at 1-10.

The first paragraph on page 3-84 lists locations of nearby residents, but omits any mention of the homes off of Oregon Trail Road. Why? These are the people who live the closest and will be most impacted by the project. These are also the same properties that do not show up on the 2009 map indicating private property parcels as outlined and shaded areas. Several of

The modeling study conducted for this project is the accepted standard for NEPA analysis. Refer to Section 4.10.2-Direct and Indirect Effects by Alternative for an explanation of the conservative assumptions that were used in the noise modeling analysis. In summary, the noise modeling is considered "conservative" because it assumes that all receptors (i.e. residences) are downwind of the noise sources (i.e. WTGs) simultaneously, which is a physical impossibility but one that results in a conservative calculation of maximum expected sound levels.

Additionally, Figure 4.10-1. Noise Contours for the 96 WTG Layout Alternative and Figure 4.10-1. Noise Contours for the 96 WTG Layout Alternative represent the highest sound output from the turbines under maximum wind conditions. Sound levels from turbine operation will be lower under lower wind speeds, and non-existent during winds speeds below cut-in (typically 4 m/s) wind speeds.

No peer reviewed scientific studies indicate wind turbine sound being audible at a distance of 15 kilometers over land. See noise modeling presented in Section 4.10.2-Direct and Indirect Effect by Alternative for discussion on the conservative projected noise levels in the area. These models are considered conservative because the model assumes that all receptors are downwind of the noise sources simultaneously, which a physical impossibility but one that results in a conservative calculation of maximum expected sound levels.

Noise modeling presented in Section 4.10.2-Direct and Indirect Effects by Alternative indicates that at the park boundary noise levels would be less than 35 dBA (~25-27 dBA).

Section 3.10.2.3-Surrounding Land Uses and Potential Noise-Sensitive Receivers, has been updated to include residents on Oregon Trail Road.

these parcels were also omitted from Table 4.10-4 (Predicted Operation Noise – 87 WTG Layout Alternative). The table estimates expected noise levels at other nearby private property parcels.

The paragraph also states that no residences are closer than 1000 feet from turbines. Many communities are placing setback for wind turbines from residences at two kilometers (1.2 miles). Just because Clark County does not have this restriction does not mean it should not apply to the residents of the community of Searchlight. Applicant should be required to redesign the project to meet the 2 kilometer setback from ALL private property.

The noise modeling analysis included residential properties that were nearest to any wind turbine locations. Parcel 24324000010, which was included in the analysis, is closer to a wind turbine than parcel 24324000011. Similarly, Parcel 2432400021, which was included in the analysis, is closer to a wind turbine than parcel 24324000012.

The DEIS uses data from the 2000 Census. DEIS at 3-86. A census was conducted in 2010. Twelve year old data, given the changes in the country's economy and population in the past five years, is irrelevant. We request that BLM revise the DEIS to include 2010 census data, because failing to do so will mean that BLM has not complied with its obligation under NEPA to provide high-quality data for public review.

Section 4.12-Socioeconomics has been updated to reflect 2010 Census data, resulting in a change in the noise section from 576 to 555; however, this did not change the results of the analysis.

The DEIS spends untold pages discussing the methodology, etc. DEIS at 4-79. The fact is that most people who will be affected could tolerate the construction noise for the 8 to 12 month period. This is assuming the construction will not occur 24 hours per day for 365 days. What is totally unacceptable is having to live with the noise from wind turbines for 30 to 50 years. The turbine sound is never-ending, and is, in fact, 24 hours per day, 365 days per year.

The 1,400 feet setback from a wind turbine from private property is entirely inadequate. DEIS at 4-81. Clark County and BLM should develop standards for wind projects, similar to what is happening in other parts of the U.S., which would require a minimum setback of two kilometers (1.2 miles) from private property.

The DEIS states "Blasting might be necessary in order to construct access roads and set turbines." DEIS at 4-82. Change "might" to "will." The hardness of the granitic bedrock will make the use of blasting necessary in much of the project area.

It is not certain that blasting will be necessary because on the ground geotechnical studies have not yet been conducted.

The source of the Wind Table data is from Duke Energy. DEIS at 4-84. It would be far more believable if the data was from an independent source, or if BLM had exercised its independent obligation under NEPA to verify and evaluate the information in the NEPA document. As stated earlier in these comments, the Duke Energy representative's description of sounds from wind turbines is not credible.

The data in Table 4.10-2-Operation Noise Model Parameters, were provided by a wind turbine vendor, and represent the sound power level of the turbine as measured according to IEC 61400-11:2002. This standard was specifically developed to quantify noise output from wind turbines.

BLM must require the applicant to do more computer modeling with different inputs for temperature, humidity, and including other ambient noise. DEIS at 4-84. Certainly an industry with twenty years of experience with wind turbines has computer programs that can model a variety of conditions, and BLM—as an expert land management agency—possesses the expertise to evaluate such data. Additionally, are there not studies available that were performed in the field with actual operating wind turbines? The area around Palm Springs, California has similar terrain and atmospheric conditions. What studies on turbine generated noise are available?

Refer to noise modeling presented in Section 4.10.2-Direct and Indirect Effects by Alternative for discussion on the conservative projected noise levels in the area. The modeling study conducted for this project included very conservative assumptions that included all receptors being downwind from all turbines simultaneously (a physical impossibility), and the maximum sound output from the turbines under maximum wind conditions (25 m/s). Variations of temperature and humidity conditions would not be anticipated to result in significant changes to the already very conservative results.

The table on page 4-85 omits Parcel 24324000011? Why? This parcel has people living on it full time. They will be far more impacted than the undeveloped properties that are listed. Was this parcel left off intentionally? Also, Parcel 24324000012 was omitted. It, too, lies very close to the nearest turbines, but at present is undeveloped. This table should be redone, and sound data for these two parcels included, as well as other nearby parcels which were not omitted.

Clark Country approved the Special Use Permit in 2010, not 2011. DEIS at 4-87. Obviously, Duke is aware turbines create a lot of noise or it would not have applied for the Waiver of Standards to permit a 16 percent increase in allowable noise. Also, if noise for nearby property owners is excessive, will applicant turn off the turbines at night? *Id.* This has been required in other parts of the country.

What are the "applicable APMs and MMS"? DEIS at 4-91. Would this include turning off turbines at night, or if this is not successful in giving the landowners relief, buying out the property of the people who are affected?

K. The DEIS fails to adequately evaluate effects on human health and safety.

The DEIS does not adequately disclose potential effects on human health and safety. In describing the supposed mitigation measures, the DEIS describes that "fire prevention" will be provided by the Clark County Fire Department Rural Station 75 located in Searchlight. DEIS at 2-49. However, the small volunteer fire department in Searchlight is totally unprepared to fight the types of wildfires created by failed wind turbines or construction machinery, which can quickly spread over thousands of acres of rough terrain. BLM's nearest fire station is approximately 40 miles away; Laughlin and Boulder City are also at least 40 miles away. All of those stations are approximately one-hour travel time away. Short of creating a fire break around all residences and the entire town of Searchlight (and destroying even more desert vegetation), there is a very good chance that the entire town could be destroyed by a turbine-caused wildfire under the often bone-dry, windy conditions present near the site before adequate fire-fighting capacity arrived.

There should be serious concerns about turbine-caused wild fires, and more complete disclosure of the potential for fires than currently appears in the DEIS. DEIS at 3-109, 4-120. One only needs to visit the Altamont area of northern California to see the frequency of fires within an industrial wind energy facility; BLM should disclose how frequently turbines at other generation sites cause fires. The cause may be equipment failure, or the attraction of lighting to tall structures. Summertime storms in the area of Searchlight are accompanied by a great deal of lightning strikes. Placing 428-foot tall turbines in an area of frequent electrical storms, where they will be the most prominent features in the landscape, should not be permitted.

The DEIS at page 4-120 describes the propensity for WTGs to cause fires. As discussed earlier, the local volunteer fire department may not be able to respond with enough fire-fighting capability to handle wind turbine caused fires, and other fire-fighting agencies are at least 40 miles distant. This would create a very hazardous situation for the residents of Searchlight. Also,

The noise modeling analysis included residential properties that were nearest to any wind turbine locations. Parcel 24324000010, which was included in the analysis, is closer to a wind turbine than parcel 24324000011. Similarly, Parcel 2432400021, which was included in the analysis, is closer to a wind turbine than parcel 24324000012.

The special use permit was obtained because noise levels would not be below the Clark County standard of 43 dBA at the property line, but the noise levels would be below such at the actual residences (see Table 4.10-3. Predicted Operation Noise – 96 WTG Layout Alternative and Table 4.10-4. Predicted Operation Noise – 87 WTG Layout Alternative). See noise modeling in Section 4.10.2-Direct and Indirect Effects by Alternative, for discussion on the conservative projected noise levels in the area. It is not anticipated that noise would exceed Clark County Noise Standards at residences; therefore, no mitigation is required.

Section 4.14-Health and Human Safety Impacts of the document contained a detailed description of the potential effects. Mitigation to reduce fire-related risk is described in MM SAFE-4: Construction Fire Prevention Measures. One measure was to maintain fire suppression equipment on site during construction.

Section 4.14-Health and Human Safety Impacts of the document includes also included on-site measures such as; To reduce fire risk, the Applicant would construct a 20-foot-wide firebreak on the exterior of the perimeter fencing surrounding the O&M building and the proposed substations, in addition to a 20-foot wide firebreak surrounding individual WTG locations (APM-7). Shrubs and other large vegetation would be removed from the firebreak. Grading or discing would maintain the firebreak.

The electrical equipment enclosures that would house the transformers would be either metal or concrete structures. Any fire that could potentially occur would be contained within the structures, which would be designed to meet National Electrical Manufacturers Association standards for electrical enclosures (APM-14).

Additionally, mitigation measure included as an inherent element of the project, APM-7, is for development and implementation of an Emergency Response Plan that would include fire suppression and control.

will exploding turbines cause rare Earth elements to leak into the region? Rare Earth elements, which may cause potential health hazards, are used in manufacturing high-efficiency wind turbines. Exhibits 10, 33. What is the fire/safety plan for this? Who is financially responsible for suppression?

The creation of the fire breaks mentioned would result in clearance of a large amount of desert flora. DEIS at 4-120. This would contribute to very dusty conditions throughout the entire project area. How would Duke prevent dust from blowing following clearing of all vegetation? What ROW conditions will BLM require to prevent this? Will this require even more water than originally stated? The DEIS also indicates a safety set-back from EACH TURBINE OF 886 FEET. *Id.* This would essentially preclude the use of the roads by ORVs, even though in several places in the DEIS one of the "benefits" stated would be the creation of the roads throughout the project. If the roads cannot be used within 886 feet of the WTGs, this essentially prevents the use of any of the roads by the public at any time.

The DEIS conveniently overlooks and fails to evaluate the most significant potential fire hazard/hazardous material/explosion hazard that has been by the applicant is the potential for damage to the high-pressure (300 to 600 psi) Southwest Gas Company gas pipeline(s) that passes by the east side of the town of Searchlight, and runs generally north-south the entire length of the project. DEIS at 4-14 (no discussion of gas pipeline). This gas pipeline is 40 to 50 years old, and in most areas is very near the surface. It enters the state near Laughlin and delivers natural gas to the Las Vegas metropolitan area.

By specification, the pipeline should have been buried a minimum of three feet below grade. However, given the hardness of the bedrock in the area, there is a very good chance that much of the pipeline lies less than three feet below the surface. It is likely that minimal consideration was given at the time to the long-term integrity of the line, and likely no precautions were taken against the imponderable possibility (at that time) that an industrial energy generation facility would be built literally on top of it. The potential for construction (blasting or surface construction) damaging the high pressure gas pipelines in the area is probably the most serious issue that the DEIS ignores. As illustrated by the gas pipeline explosion in San Bruno, California in September 2010, which killed eight and sent a fireball 1,000 feet into the air, or the June 2010 pipeline explosion in Johnson County, Texas, which killed three, construction activities near pipelines can have catastrophic effects.

In describing the transmission lines and pipelines on the project site, the DEIS lists the electrical transmission lines, but makes no mention of high pressure gas pipeline(s) that cross the full length of the project area. DEIS at 3-110, 4-119. Why are gas pipelines ignored in the text of the DEIS, when they are shown on several maps in the DEIS and briefly referenced in the "utility corridors" section? *E.g.* DEIS at 1-5 (Figure 3), 4-56. What safety provisions will be put in place to protect the workers and the residents?

Plans for the project show the gas pipeline(s) being crossed in at least three places by newly constructed roads. Additionally, the plans show a new road paralleling or perhaps on top of the gas pipeline north of town at Oregon Trail Road and extending south for about one-half

Water is the only soil stabilizing substance that is non-toxic. BLM only authorizes water to be used in T&E species habitat. Once stabilized, the firebreaks should not require additional watering. Dust control for the firebreaks will be factored into the O&M water demand. Dust control measures will be in accordance with DAQ requirements and it is not anticipated that fugitive dust emissions from firebreaks would exceed NAAQS.

Southwest Gas Corporation holds a ROW grant from BLM for an existing gas line within the project area. The grant is non-exclusive; therefore, the BLM reserves the right to authorize other actions within a ROW area for compatible uses. The Applicant will be required to coordinate with Southwest Gas should there be any pipeline crossings, e.g., roads, underground electrical collection systems, etc. The result of the coordination would be a legally binding agreement that such crossings would meet Southwest Gas-provided standards for engineering and applicable material requirements to ensure the safe and continued operation of the gas line.

mile (0.5 miles). This area is very rocky and irregular, and this is the area where it is likely that the pipeline was practically laid on the ground surface, and topsoil scraped into a berm over the top of it. A portion of the pipeline under Cottonwood Cove Road may have been reburied to a greater depth—but BLM owes the public the obligation to gather this information, disclose it, and evaluate the effects of the project on the pipeline.

What safety measures will be taken to prevent the compromise of this existing gas pipeline? If the gas pipeline were to be ruptured by the 15-axle trucks and other very heavy equipment that will be crossing over it, the resulting fire and explosion could literally wipe Searchlight off the map. It also would cut off a much of the supply of natural gas to the Las Vegas Metropolitan Area.

The blasting that will be required to excavate the WTG foundations, and/or the use of heavy-duty Ho-Ram type vibratory equipment could also compromise the integrity of this high-pressure gas pipeline. Why is there no mention of this in project documents? What provisions will be made to prevent a catastrophe?

South of Searchlight another area of the gas pipeline could be compromised by the turbine, road or underground collection line construction adjacent to or on top of the gas company easement. Also, how deep will the trenches be for the Pike Underground Collection System? The gas pipeline is a minimum of three feet deep. Will there be a potentially deadly conflict between the existing gas pipeline and the underground collection system in the area of WTG's 60, 74, 75 and 76 (preferred alternative numbering)? Has BLM or Duke done the research necessary to determine if those parts of the project need to be relocated?

The DEIS ignores potential human health effects from the dust that the project will cause, although it acknowledges that "[t]he soils in the Searchlight area are susceptible to erosion by wind and water." DEIS at 3-5. Removal of soil crusts and construction and operation of turbines and associated infrastructure is certain to increase the wind-caused erosion throughout the life of the project. The DEIS discloses that "[w]inds over 50 miles per hour (mph) are infrequent but can occur with vigorous storms. Winter and spring wind events often generate widespread areas of blowing dust and sand." DEIS at 3-37. The project is sited within two miles of the town of Searchlight, and along a major route used by tourists and residents to reach Cottonwood Cove in the Lake Mead NRA. Accordingly there is a significant possibility of adverse human health effects from blowing dust, in the form of respiratory illness, including Valley Fever. The DEIS does not disclose or evaluate the potential that construction and operation of the project will have adverse effects on human health, in particular the potential public health impacts from Valley Fever.

Valley Fever (coccidioidomycosis) is an infection caused by inhaling the microscopic spores of the fungus *Coccidioides immitis*. Spores are the tiny, thick-walled structures that fungi use to reproduce. Valley Fever is spread through spores from airborne dust as a result of ground disturbance. Coccidioidomycosis exists in three forms. The acute form produces flu-like symptoms. The chronic form can develop as many as 20 years after initial infection and, in the lungs, can produce inflamed, injured areas that can fill with pus (abscesses). Disseminated

According to the Center for Disease Control in 2010 there were over 16,000 reported cases of Valley Fever (i.e. coccidioidomycosis), the majority of which were located in Arizona and California (Accessed July 3 2012 at: http://www.cdc.gov/fungal/coccidioidomycosis/statistics.html.). According to the University of Arizona's Valley Fever's Center for Excellence, two-thirds of all infections in the United States occur in Arizona, mostly in the urban areas surrounding Phoenix and Tucson. (Accessed on line July 3, 2012 at: http://www.vfce.arizona.edu/GeneralInfo/default.aspx). This research suggests that although Valley Fever may occur in Nevada, it is not as likely compared to other parts of the southwest. This statement is supported by the information available from Southern Nevada Health District which documents less than 10 cases per year of Valley Fever have been reported in Clark County, Nevada to date (2009-2012) (accessed online July 4, 2012 at: https://www.southernnevadahealthdistrict.org/stats-reports/disease-stats-jan12.php.).

coccidioidomycosis describes the type of coccidioidomycosis that spreads throughout the body affecting many organ systems and is often fatal.

Coccidioidomycosis is an airborne infection. The fungus that causes the disease is found in the dry desert soil of the southwestern United States, Mexico, and Central and South America. Coccidioidomycosis is sometimes called San Joaquin fever, valley fever, or desert fever because of its prevalence in the farming valleys of California.

The chronic form of coccidioidomycosis normally occurs after a long latent period of 20 or more years during which the patient experiences no symptoms of the disease. In the chronic phase, coccidioidomycosis causes lung abscesses that rupture, spilling pus and fluid into the lungs, and causing serious damage to the lungs. The patient experiences difficulty breathing and has a fever, chest pain, and other signs of pneumonia. Medical treatment is essential for recovery.

In its disseminated form, Valley Fever diagnosis of coccidioidomycosis spreads to other parts of the body including the liver, bones, skin, brain, heart, and lining around the heart (pericardium). Symptoms include fever, joint pain, loss of appetite, weight loss, night sweats, skin lesions, and difficulty breathing. Also, in 30-50% of patients with disseminated coccidioidomycosis, the tissue coverings of the brain and spinal cord become inflamed meningitis.

BLM must consider the potential for respiratory illnesses occurring in local residents, resulting from the dust. Many of the local residents are elderly and susceptible to respiratory diseases; some even moved to Searchlight to escape air pollution in other parts of the country. There exists a significant possibility for outbreaks of Valley Fever due to the project. In 2009, in nearby Boulder City and Henderson, people contracted Valley Fever simply by outside on windy, dusty days. Exhibit 34. Valley Fever has been documented in many arid regions in the southwest US. There are reports of recent cases of Valley Fever in areas of Southern California deserts that are being stripped of vegetation for the installation of wind and solar projects. BLM must disclose and evaluate the human health impacts of this project, including its potential to cause incidents of Valley Fever among local residents and visitors.

The DEIS inadequately discloses the impact of noise, air pressure, flicker effect (from spinning turbine blades) and nighttime strobe lights on public health. A recent draft study by the Oregon Health Authority's Office of Environmental Public Health, entitled "Strategic Health Impact Assessment on Wind Energy Development in Oregon," outlines some significant health concerns from industrial-scale wind energy development. The study is enclosed on the CD-ROM. Please evaluate this information in revising the DEIS so it completely discloses potential health effects from the project. Turbines would be located within ¼ mile of populated areas and roads, including the Cottonwood Cove Road over which 300,000 people travel annually, far closer to area of human concentration than many wind projects.

The Strategic Health Impact Assessment reports that "Environmental noise in community settings is linked to sleep disturbance, annoyance, stress, and decreased cognitive performance

The Final Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States (2005) states that shadow flicker is not considered as significant an issue in the United States as in Europe. It does note that flickering effect may be considered an annoyance, but that modern three-bladed wind turbines are unlikely to cause epileptic seizures in the susceptible population due to the low blade passing frequencies. The relevant text from the Programmatic EIS states:

"When the sun is behind the blades and the shadow falls across occupied buildings, the light passing through windows can disturb the occupants (Gipe 1995). Shadow flicker is recognized as an important issue in Europe but is generally not considered as significant in the United States (Gipe 1995). The American Wind Energy Association (AWEA 2004) states that shadow flicker is not a problem during the majority of the year at U.S. latitudes (except in Alaska where the sun's angle is very low in the sky for a large portion of the year). In addition, it is possible to calculate if a flickering shadow will fall on a given location near a wind farm and for how many hours in a year (AWEA 2004). While the flickering effect may be considered an annoyance, there is also concern that the variations in light frequencies may trigger epileptic seizures in the susceptible population (Burton et al. 2001). However, the rate at which modern three-bladed wind turbines rotate generates blade-passing frequencies of less than 1.75 Hz, below the threshold frequency of 2.5 Hz, indicating that seizures should not be an issue (Burton et al. 2001). (Section 3-20)."

[7-9]. These effects, undesirable in their own right, can in turn adversely affect physical health." Strategic Health Impact Assessment at 6. "There is some evidence that wind turbine sound is more noticeable, annoying and disturbing than other community or industrial sounds at the same level of loudness [16-20]." *Id.* "A small number of epidemiological studies have linked wind turbine noise to increased annoyance, feelings of stress and irritation, sleep disturbance, and decreased quality of life [16-18, 22]." *Id.* The study concludes that "Sound from wind energy facilities in Oregon could potentially impact people's health and well-being if it increases background sound levels by more than 10 dBA, or results in long-term outdoor community sound levels above 35-40 dBA." *Id.* at 9. The rest of the study provides more details. Please also disclose and evaluate other studies that have shown potential health impacts from the noise and visual impacts associated with wind turbines.

Section 4.10-Noise Impacts discloses that noise levels at households are all below the standard and threshold set by Clark County.

The DEIS also fails to evaluate the Waiver of Development Standards that Clark County, Nevada, granted to Duke for the project. *See* Searchlight Wind PUC filing 11-2011 on enclosed CD-ROM. Clark County waived three significant development standards that limit development within the county. It waived the 2,000 foot set-back, allowing turbines to be constructed as close as 1,345 feet from a residential structure, with four turbines closer to homes than the 2,000 foot set-back. *Id.* at p. 11. It waived the 35 foot standard for height, allowing instead turbine construction up to 428 feet tall. *Id.* And it waived the normal nighttime noise limit of 43 decibels, allowing an increase to 51 decibels. *Id.* The DEIS does not disclose these waivers or evaluate the effects of the increased noise and proximity to residential areas that these waivers allow.

Section 4.10-Noise Impacts states" In 2011 Clark County approved a Special Use Permit application for the Proposed Project. They found that there were nighttime noise level exceedances at the property line, described above, but that at the actual residence locations the levels were all below the County's threshold. Therefore, the project was approved by Clark County."

The DEIS also fails to evaluate the potential social effects to a rural community from the importation of transient construction workers. The DEIS admits that it is "very common for a significant amount of specialized labor to be brought into the region from elsewhere (e.g., [wind turbine generator] erection crews)." DEIS at 4-100. However, the DEIS fails to describe how these out-of-area workers would result in increased traffic accidents, damage to existing roads, and increased crime. Such outcomes are not "beneficial" to a small, rural community, even though they may provide benefits which flow to other people outside the community. BLM should disclose and evaluate the likely societal impacts from increased presence of transient construction workers near the community.

Over 300,000 people travel Cottonwood Cove Road annually, the majority of which are from outside the community. The construction work force of would represent about 1% of that number.

L. The DEIS fails to adequately evaluate geology and hydrogeology.

The DEIS presents a cursory and incomplete overview of the geology and hydrogeology of the site. The DEIS frankly admits that no geotechnical studies have been completed yet for the project. DEIS at 2-40, 4-3 ("Each WTG foundation footprint located in competent rock would be much less because the foundation would consist of an excavation into the rock; the depth and circumference of each rock foundation excavation would depend on site-specific geotechnical conditions."), 4-10.

The DEIS covers water resources in Section 3.3. Water resources topics include Watershed Boundaries, drainage basins, flood plains, and surface and ground water. In recognition that there are no surface water resources at the site, the DEIS focuses on ground water resources. Among the defects in the DEIS that BLM must correct are:

The DEIS author in section 3.3.2.3 (Surface water) covers alluvial material. Alluvial material consisting of weathered rock, gravel and sand is the primary material for both storage and flow of subsurface water resources.

- Alluvial material is weathered and eroded rock from the surrounding mountain ranges. This material consists of weathered, decomposed rock which results in the development of desert soils. These soils consist of rock fragments, gravel, sand, and clay.
    - Void spaces within alluvial material are the primary storage for ground water resources in this desert region.
    - The desert plant community in the Piute Valley is unique. This valley is a transition zone of the Great Basin Desert, the Mojave Desert, and the Sonora desert. Plant communities from all three deserts are represented in the Piute Valley
- The DEIS fail to identify the thickness of the alluvial material.
    - Alluvial material thickness varies throughout the area.
    - Alluvial material around the town of Searchlight and the surrounding mining district consists of a thin layer.
    - Alluvial materials south of Searchlight near the town of Cal-Nev-Ari, Nevada, are much thicker. Material eroding from the McCullough Mountains has produced a thick alluvial material.
    - The area surrounding Cal-Nev-Ari has no exposures of bedrock protruding through the alluvial material.
- Subsurface water flow and storage will vary based on alluvial material present
    - It is apparent that little to no actual field work was conducted to survey actual alluvial material within each watershed basin.
    - Surface exposures of crystalline rocks throughout the watershed basins are indications of thin alluvial material and a shallow subsurface aquifer. The alluvial material is only one (1) to three (3) feet thick in and around Searchlight.
    - Exposures of mineralized plutonic crystalline quartz rich rocks are the primary ore bodies of the Searchlight Mining District.
    - Alluvial material around Searchlight is a thin veneer covering portions of the crystalline bedrock.

Comment noted.

The existing Geological environment was presented in EIS Section 3.1-Geology, Soils, and Minerals, and impacts in Section 4.1-Geology, Soils, and Minerals. Geotechnical testing will be conducted at each WTG location prior to construction.

- Alluvial material is the principal material for shallow aquifer storage and flow of subsurface water.
- Crystalline granitic rocks around Searchlight are mineralized and well exposed around the town of Searchlight.
- These crystalline granitic rocks have little permeability (water transport) or porosity (water storage) potential.
- This geologic setting has resulted in shallow water aquifers. The shallow aquifer used to sustain plant life in the area is near surface one (1) to four (4) feet deep. Subsurface water flow through the thin alluvial apron, which lies on top of the crystalline bedrock. Very little water will penetrate below the alluvial to the crystalline granitic and quartz rich rocks.
- Alluvial material is the primary source of water for the desert vegetation during warm and dry periods in the Mojave Desert
- Subsurface water in alluvial material is the primary water source for plants such as Yucca and Joshua trees. Disruption of near surface water flow will impact water resources to vegetation. These trees and other succulent plants rely on shallow water resources for both the stabilization and reproduction. These indirect effects of construction on vegetation are not sufficiently disclosed and evaluated in the DEIS.

- Road construction will cut through the alluvial material disrupting the sub surface water flow. The shallow depth of bedrock will affect how and where construction can occur and how and where facilities can be placed on the site.
  - Road construction and foundations for wind turbines will require blasting to break up the hard granitic crystalline rocks.
  - This blasting will require removal of the upper alluvial material, disrupting ground water flow, and requiring water resources for dust mitigation.
  - The mining in and around the Searchlight mineral district is hard rock mining due to granitic crystalline rocks.
  - Deep water storage is in a fractured matrix of non porous crystalline rocks.
- The north and east portions of the project site have very irregular topography, which is not illustrated in any map in the DEIS but is shown in the map from VTN dated 11-10-2009. This will make construction more difficult and ensure that blasting will be necessary,

Well data indicate that groundwater in the project area is variable but ranges from 170 to about 270 feet (Section 3.3.2.4-Groundwater Resources). Construction excavation for the WTGs would range from ten to thirty feet deep (DEIS Section 2.3.2-Construction, subheading WTG Pads and Foundations). Therefore, it is very unlikely that near surface flows would be impacted.

During construction Searchlight Wind Energy, LLC would be required to use an approved dust palliative (such as water) to lesson blowing soil. After construction is complete disturbed areas would be revegetated to the extent possible.

Figure 2.1-1. 96 WTG Layout Alternative and Figure 2.1-2. 87 WTG Layout Alternative has been updated to illustrate topography. Section 2.3.2-Construction under Road Construction has been updated disclosed that blasting may be required. It cannot be determined to what extent blasting would be required until the ground geotechnical testing has been completed.

particularly taking into account the relatively flat grades that would be necessary to allow for safe passage of long loads. The DEIS does not discuss this issue.

- The area where the Southwest gas pipeline passes through the northern portion of the project site is very rocky and irregular, and the pipeline is located at a very shallow depth in this area. Please specifically describe the geology along the pipeline route to evaluate whether *any* construction can safely be done near this pipeline.

- The DEIS discusses (at page 4-3) that the blade throw safety set-back for each WTG of 886 feet, or an area of approximately 57 acres. The total acres of the project site actually affected simply for safety set-backs would be 4,959 acres, or 7.75 square miles. Why would BLM consider granting a ROW for an industrial facility with this many known hazards, hazards which also tie up far more land in perpetuity than stated in the DEIS?

- Water Flow Models and the hydrology of the Eldorado, Colorado and Piute drainage basins focus on two points.
    - Ground water flow estimates based on a 1966 study by Rush and Huxel.
        - This study is used to build a case for an increase in the water resources in the project area, justifying the withdraw of large amounts of water for construction.
    - Nevada State Water Engineer Report
        - The Eldorado Valley has potential groundwater resources of 2,390 acre-feet/year, which is more than four times the estimated perennial yield of 500 acre-feet per year (Rush and Huxel, 1966).
        - The Piute Valley has potential groundwater resources of 5,039 acre-feet/year, which is over 16 times the estimated perennial yield of 300 acre-feet/year (Rush and Huxel, 1966).
        - The Colorado River Valley has committed groundwater resources of 4,547 acre-feet/year, which is over 22 times its estimated perennial yield of 200 acre-feet/year (Rush and Huxel, 1966).

- The DEIS report attempts to justify the use of ground water based on the differences of water flows in the Rush and Huxel, 1966 paper and the report from the Nevada State Water Engineer Report.
    - The "Nevada State Water Engineer Report" presents more questions than answers, which BLM must answer, disclose and evaluate to the public:

Southwest Gas Corporation holds a ROW grant from BLM for an existing gas line within the project area. The grant is non-exclusive; therefore, the BLM reserves the right to authorize other actions within a ROW area for compatible uses. The Applicant will be required to coordinate with Southwest Gas should there be any pipeline crossings, e.g., roads, underground electrical collection systems, etc. The result of the coordination would be a legally binding agreement that such crossings would meet Southwest Gas-provided standards for engineering and applicable material requirements to ensure the safe and continued operation of the gas line.

Each turbine has a setback recommended by the manufacturer, which ranges from 866 to 1,050 feet as a function of rotor diameter. No turbines are located within the setback from any building or road, other than the spur road to each turbine used for construction and maintenance.

BLM considers publications of the State Engineer to provide reliable information from a credible source regarding Nevada water resources. The commenter would appropriately, direct questions about their methods to them. Since no new wells are planned for this project and no new water rights will be appropriated, the commenter's questions are irrelevant, since water rights holders, SWS, LVVWD, or anybody else who will be supplying that water cannot exceed its duty.

- What was the method used in determining ground water flow rates?
- How many well withdraws were used in pump test?
- What was the duration of each test?
- Where are the locations of well test?
- What was the recharge interval for each well?
- What (if any) is the criteria used in sub divisions of the three basins with respect to water depth, and shallow and deep water resources?
- Are all three (3) drainage basins (Eldorado, Piute, and Colorado River Valley) equal with respect to subsurface hydrology?
- Are water resource estimates based on well locations throughout the area, and does the study include areas of varying alluvial material.
- What is the variation in water flow in areas of crystalline rock such as Searchlight and thicker alluvial near Cal-Nev-Ari.
- Does the subsurface hydrology of Searchlight and the Surrounding mining district match the subsurface hydrology of the surrounding areas?
- There is considerable variation of rock types ranging from volcanic tuffs, rhyolites and plutonic granites that the subsurface hydrology will vary according to rock type.

To accurately depict the environment on the project site, and inform the public and the decision maker about the geological baseline. This baseline is essential to be able to understand how the project would have to be constructed, what natural limitations there will be on where and how facilities can be placed, and to understanding the likely impacts of activities on the project site. To provide this baseline information, BLM must conduct detailed mapping of the project area to determine the depth of alluvial material, exposures of granitic crystalline rock and water basins. Subsurface water within the Searchlight Township and mining district are not the same as those in the Eldorado Basin and southwest Piute Basin. Alluvial material the major source of ground water varies with short distances of less than four (4) miles.

The DEIS presents only a very basic summary of the geology and hydrogeology. The study of groundwater, and basin analysis used existing standard USGS maps to draw surface water contributions and implied that these boundaries represent accurate subsurface water. The flaw in the study is varying geology with respect to plutonic crystalline rocks and alluvial material. Water resource estimates cannot be accurately assessed on simple topography obtained from USGS maps. Ground water withdrawals in the southwestern part of the Piute valley will not

The existing Geological environment was presented in EIS Section 3.1-Geology, Soils, and Minerals, and impacts in Section 4.1-Geology, Soils, and Minerals Impacts. Geotechnical testing will be conducted at each WTG location prior to construction.

Well data indicate that water in the project area is variable but ranges from 170 to about 270 feet (Section 3.3.2.4-Groundwater Resources). Construction excavation for the WTGs would range from ten to thirty feet deep (Section 2.3.2-Construction, subheading WTG Pads and Foundations). Therefore, it is very unlikely that near surface flows would be impacted.

have the same impact as ground water withdrawal from Searchlight. Disruption of near surface water flow around the town of Searchlight will impact a shallow aquifer. Disruption of near surface aquifers has far greater impacts to water resources. Shallow subsurface water is the primary source for vegetation such as the Joshua tree. These trees and other succulent plants rely on shallow water resources for both the stabilization and reproduction of desert communities. A detailed analysis of water resources is important and necessary in order to prevent biological destruction of the area.

M. The DEIS fails to adequately evaluate effects on air quality and climate.

In its discussion of air quality impacts, DEIS at 3-37, BLM fails to disclose that the town of Searchlight has a high percentage of "sensitive populations," elderly people with existing health issues. Approximately 31% of the population is over 65 years of age, while over 35% more are between 45 and 64 as of the 2000 census, and these percentages are likely higher now and should be disclosed along with accurate current demographic information. Also, how will the applicant prevent the air quality at Lake Mead NRA from being compromised by the dust that will result from destroying the desert vegetation and creating 36 miles of unpaved roads, and the very large areas stripped for fire breaks?

The DEIS does not provide sufficient information about the likely negative effects of the project on air quality in the area, particularly with respect to dust. The DEIS acknowledges that "[t]he soils in the Searchlight area are susceptible to erosion by wind and water." DEIS at 3-5. Wind erosion will be a problem for the life of the project, and beyond, not just during construction. The area is prone to blowing dust already. Once the amount of destruction of desert vegetation and the natural crust of the soil surface necessary for the proposed project has taken place, the area will likely be a dust bowl.

Cryptobiotic soil crusts are an essential ecological component in arid lands. They are the "glue" that holds surface soil particles together precluding erosion, provide "safe sites" for seed germination, trap and slowly release soil moisture, and provide carbon dioxide uptake through photosynthesis.[20] The DEIS states that the project area in Clark County is designated as a management area for fine particulates (PM_{10}) but implies also that it is considered "attainment/unclassifiable area" for PM_{10} emissions. DEIS at 3-39. However, the Mojave Desert Air Quality Management District in California has found that this same area is already in non-attainment for PM_{10} particulates. The construction of the proposed project would further increase emissions of these types of particles because of the disruption and elimination of potentially thousands of acres of cryptobiotic soil crusts.

[20] Belnap, J., S. L. Phillips, J. E. Herrick, J. R. Johansen. 2007. Wind erodibility of soils at Fort Irwin, California (Mojave Desert), USA, before and after trampling disturbance: Implications for land management. Earth Surface Processes and Landforms 32(1):75-84; *see also* Belnap, J. *et al.*, Biological Soil Crusts—Ecology and Management (2001) on enclosed CD-ROM

The project emissions will not exceed the NAAQS and Clark County DAQ air quality standards described in Section 4.6- Air Quality Impacts.

Refer to APM-3 - the applicant would use water to control dust to comply with Clark County DAQ dust control requirements (APM-3). Additional mitigation measures are discussed in Section 4.6- Air Quality Impacts.

Less than 2 percent of the project area (382-410 acres) would be disturbed (either temporarily or permanently) as a result of the proposed project; this is a negligible amount of disturbance in relation to the project area (18,949 acres). No current data exists to support that the loss of such a small amount of soil crust relative to available crust would create a measurable change in CO2 volumes in the atmosphere. Furthermore, the Governor of the State of NV has delegated the authority to Clark County DAQ as the compliance oversight for Clean Air in the project area. Clark County has full jurisdiction of the project area, which has been determined to be in attainment/unclassifiable for PM10 emissions.

The DEIS does not describe the on-site cryptobiotic soil crusts. The proposed project will disturb an unidentified portion of these soil crusts and cause them to lose their capacity to stabilize soils and trap soil moisture. The DEIS fails to provide a map of the soil crusts over the project site, and to present any avoidance or minimization measures. It is unclear how many acres of cryptobiotics soils will be affected by the project. A supplemental DEIS must be prepared which identifies the extent of the cryptobiotic soils on site and analyze the potential impacts to these diminutive, but essential desert ecosystem components as a result of this project.

The DEIS's discussion of climate change effects is also inadequate because it provides insufficient information to meaningfully understand the effect of this project on the emission and capture of greenhouse gases. For example, how much carbon dioxide and other greenhouse gas emissions would be offset by construction of the turbines? Would there be *any* offset, if—for example—the additional electricity generated simply led to an increased use of electricity, such that the construction of renewable energy facilities would not remove any generation of carbon dioxide and other greenhouse gases from the electrical production infrastructure? Will there be negative effects on climate change from construction and operation of the project? For example, how much of the greenhouse gas sulfur hexafloride will be released by new transmission? How will the loss of the carbon absorption associated with cryptobiotic soils and vegetation that will be removed

N. The DEIS fails to adequately evaluate effects on transportation.

The DEIS's discussion of transportation is cursory and inadequate. As with most other impacts, the DEIS notes that a Traffic Management Plan will be developed at some future point. However, this means that there is no opportunity for the public to comment meaningfully on what the "plan" is to mitigate the transportation impacts of the project. A Traffic Management Plan needs to be finished and circulated again for public comment so that local residents can give public input to how truck traffic will impact their local roads, and how tourism will be affected. What is the alternate construction route to Cottonwood Cove Road? Photographs should be taken of road conditions before construction and after to document any damage for the applicant to repair.

The DEIS does not recognize the primary users of the dirt roads northeast of Searchlight. DEIS at 3-43. There are at least five full-time residences, with an estimated 10 to 12 people, who use Oregon Trail Road as their ONLY access to their homes. The DEIS indicates that Oregon Trail Road from US 95 east to Gas Line Road will be used as a major access point for construction of the northeast portion of the project. What provisions will be made to allow these people, who have lived there for 10 to 20 years or more, to have unimpeded access and egress to and from their homes? One family has elementary-age school children; several of the residents work full time. Others are elderly and may need emergency services. Will they be able to get out to US 95 without being held up by construction equipment and traffic for twelve months?

The DEIS does not mention that one of the roads that is routinely maintained is Southwest Gas Company's Gas Line Road. It is used by ORVs, and is in fair condition. However, as detailed earlier, this route, if used by heavy equipment, has a potential for disaster.

The purpose and need for the project is not to offset greenhouse gas emissions. Section 4.6-Air Quality Impacts includes an analysis of air quality and greenhouse gas emissions. No current data exists to support that the loss of such a small amount of soil crust relative to available crust would create a measurable change in CO2 volumes in the atmosphere. Currently there is no technically defensible methodology for predicting potential climate changes from GHG emissions. However, there are, and will continue to be, several efforts to address GHG emissions from federal activities, including BLM authorized uses. Furthermore, this proposed action does not meet the emission level or production capacity for reporting and is not subject to mandatory reporting rules found in General Provisions (40 CFR 98).

The Traffic Management Plan would be prepared by the party responsible for implementing it; namely the construction contractor. As safety is involved, this plan would not reviewed by the general public as the Director of the Nevada Department of Transportation holds responsibility for review. Construction could not legally commence prior to the NDOT approval. Refer to MM TRAN-1 for a discussion of the elements that would be included in the plan. In addition, NDOT typically requires written notification be provided to emergency services (fire, police, ambulance, etc.) at least 24 hours in advance of traffic detours and at least 48 hours prior to the commencement of construction activities.

MM-TRAN-2, Repair Damaged Streets, would specifically require documentation of pre-construction road conditions and post-construction repair standards.

The gas pipeline is within 1000 feet of the residences mentioned in the previous paragraph. BLM must disclose this information and explain how it intends to prevent potentially deadly impacts from such use.

The DEIS states "Unauthorized use of motorized vehicles has damaged resources within the project area by crushing vegetation, disturbing wildlife, increasing noise and airborne particulates, and increasing erosion potential." DEIS at 3-43. These impacts are miniscule compared to the construction of 37 miles of new 36-foot wide roads, 87 turbines, and all of the other infrastructure mentioned. It is incomprehensible that BLM considers the very minimal incidental damage done by ORV's a problem, yet would consider turning the entire 30 square miles (18,949 acres) into an industrial zone for the next 30 to 50 years.

In the discussion of transportation impact indicators, DEIS at 4-51, the first four of the five bullet points are a given; the project would absolutely increase traffic, degrade the roads, prevent adequate emergency access, and cause loss of access to private land parcels. In addition, since each turbine has a safety set-back of 886 feet, access to recreation access points would be affected.

With 300,000 visitors annually to Cottonwood Cove in the Lake Mead NRA, on a road that is narrow and steep, adding construction traffic into the mix is a recipe for disaster. Should there be a necessity for emergency services at the Lake (a common occurrence in the summertime), there could be life-threatening delays in response time.

During the construction period those people who use Oregon Trail Road would encounter great difficulty just coming and going from their homes. Everyday activities (going to work, taking children to school, going to appointments) would become a hassle and a safety hazard.

At page 4-52, the DEIS states that "When construction is completed, access for motorized travel might increase due to the construction of 29 miles of new roads." But with each turbine having an 886 foot safety set-back due to potential for blade throw, just where will the public be allowed to drive? The roads are closer than 886 feet to each turbine. Furthermore, where would anyone WANT to drive, once the turbines are operational. Unless each turbine is set back more than 886 feet from the main roads within the project, there will be no public access. How will BLM and Duke insure that people do not get closer than the 886 feet? Will 47 acres of affected area encircling each turbine be fenced to prevent anyone from getting too close? Will there be gates on the project roads?

The DEIS states at page 4-52 that "Given the number of vehicle trips during the construction period, along with the movement of heavy construction equipment, it is reasonable to anticipate that the Proposed Action might damage pubic roads through increased use." The word "might" should be changed to "will." There is no doubt that the volume of heavy construction equipment will cause severe damage to existing roadways. However, the DEIS is incorrect to say that "Construction of the Proposed Action would have a beneficial effect on road conditions because it would result in restoration of a county road to its preconstruction conditions for both the base and the surface." DEIS at 4-52.

The commenter is incorrect in the assertion that 18,949 acres would be disturbed. The project area is 18,949 acres. Table 2.5-2. Approximate Acreages that would be Affected by Development of Action Alternatives, of the DEIS presents the disturbance associated with the build alternatives ranges from 230-249 acres of temporary disturbance, and 152-160 acres of permanent disturbance.

The setback is in conformance with BLM Instructional Memorandum 2009-043, which states that no turbine on public land will be positioned closer than 1.5 times the total height of the wind turbine (approximately 640 feet) to the right-of-way boundary. No turbines are located within the setback from any building or primary road, other than the spur road to each turbine used for construction and maintenance, or two-track and casual-use roads.

No permanent fencing of the turbines or access roads is proposed because of the additional disturbance and resulting habitat fragmentation.

Refer to Section 4.7-Transportation Impacts, which has been updated to address this comment.

The "*preconstruction* condition" of these roads is not optimal. Saying that post-construction "mitigation" will take a road back to preconstruction condition is like saying it would be beneficial to you that after your ten-year old car is totaled, you'll get the car back after 8 to 12 months in the body shop, complete with the same dings it had before it was wrecked and repaired. On the same page, the DEIS states that "Overweight and oversized loads could cause short-term disruptions to local traffic." BLM should be honest and change "could" to "will." Specifically, oversized loads going east on Cottonwood Cove Road will shut down all other traffic. The road is 24 feet wide, and is the only access route to Cottonwood Cove on Lake Mohave.

Refer to MM TRAN-2- Repair Damaged Streets, which provides that the roads would be returned to their preexisting condition. A Traffic Management Plan (MM-TRAN-1) will address effects on local traffic. The Plan would include the following element: To minimize the effects on local and Lake Mead traffic the Transportation Plan will mandate the use of flagmen or escort vehicles to control and direct traffic flow, and provide schedules that show roadway work will be done during periods of minimum traffic flow. The Traffic Management Plan would be a stipulation of the ROW Grant.

On page 4-53, the DEIS states that "Future roadway improvements in and around Searchlight could reduce potential traffic delays, improve traffic flow, and increase access for motorized travel." This is not only speculative, but its premise is inaccurate and should be corrected. If the roadways around Searchlight are improved, they still don't lead anywhere. All the new roads proposed as part of the project dead-end in the middle of nowhere. It is difficult to comprehend how this is considered beneficial.

This sentence has been removed from the EIS.

BLM also should disclose and evaluate the likely damage to roads from the sheer weight of the turbine-carrying trucks and other construction equipment, and require as a mandatory condition of any ROW grant that Duke enter into an agreement with the Nevada Department of Transportation, supported by a bond, to repair damage to the Cottonwood Cove Road and US 95 from activities associated with the project. *See* Exhibit 8.

O. The DEIS presents confusing and inaccurate information about land use.

The DEIS discloses incorrect information about land use and presents an incomplete analysis. For example, the DEIS states there, among other uses, ". . . limited livestock grazing, . . ." DEIS at 3-44. All cattle, burros and wild horses were removed from this area many years ago. With respect to the land ownership, what compensation will be given to the private owners of the small parcels totaling approximately 644 acres? *Id.* These people bought their land with the understanding they would be able to have the quiet enjoyment of their property in a remote, unspoiled area. Others bought with the intention of building homes in the future, or perhaps to speculate on the land. The land in proximity to the turbines will now be seriously devalued. If Duke argues that value will not be affected by the presence of the turbines, then the company should be willing to buy out these land owners at today's prices.

Section 3.8.2-Existing Environment has been modified to delete reference to livestock grazing.

The DEIS states the project is located in an area under the jurisdiction of the 1998 Las Vegas RMP and ROD (BLM 1998), as amended by the 2005 Wind Energy Development document. DEIS 3-45. The 1998 RMP is currently under revision; the DEIS for the revised RMP is supposed to be available this Fall. Is this statement still true? Which RMP will govern? Will there be any amendments to the RMP that address the project or the lands it affects?

The Las Vegas RMP, approved October 5 1998 is the governing document for this project, along with any other approved planning or programmatic document covering this field office or project type. The revised (Las Vegas) RMP Record of Decision is not anticipated until the summer of 2014.

On page 3-48, the acreage for Duke's rights of way listed differs from that stated elsewhere in the DEIS. This table states 24,382.56 acres; elsewhere the project is described as

The correct acreage for the proposed project area is 18,949 acres of BLM-managed lands. The total from Table 3.8-2. ROWs within or adjacent to the Proposed Project Area is from a database that has not been corrected to reflect the actual ROW.