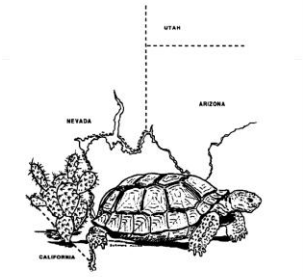


DESERT TORTOISE COUNCIL
P.O. Box 1568
Ridgecrest, California 93556
www.deserttortoise.org
ed.larue@verizon.net

8 January 2014

To: Scott Cashen, Senior Biologist

RE: Review of focused desert tortoise surveys for Searchlight Wind Energy Project

Dear Mr. Cashen,

I received your email request and attachments to review a focused desert tortoise survey for the Searchlight Wind Energy Project in Clark County, Nevada. The survey was performed by Southern Nevada Environmental, Inc. in April and May 2011. You indicated in a recent email that the opportunity to comment on environmental documents has passed, but that you would appreciate the Desert Tortoise Council (Council's) review of the document relative to the injunction your client is considering. Since I first received this request through another Council board member, I am presenting this as a formal response on behalf of the board.

1. You may already be aware that the following animal species reported on page 2 have special status designations by either the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife (even though I understand the project is in Nevada, these species are considered rare here in California): Golden eagle (*Aquila chrysaetos*), bighorn sheep (*Ovis canadensis*), desert burrowing owl (*Athene cunicularia*), and Le Conte's thrasher (*Toxostoma lecontei*). Hopefully other environmental documents I have not reviewed provide some mitigations/compensation for some or all of these species?

2. On page 3, third paragraph, I note that the action area seems to be arbitrarily chosen as 200 feet either side of the impact area, but no rationale is provided for this measurement. If, for example, raven nesting increases as the result of building these facilities, they would invariably fly out much farther than 200 feet with the increased potential of affecting smaller tortoises outside the action area surveyed. I recall that Dr. Bill Boarman found that ravens flew out as much as five miles from landfills (personal communication). Have you asked if USFWS agrees with this as a sufficient action area, or if they were consulted prior to surveys?

3. On page 4, first paragraph, I note that the methodology is reported as follows: "Additional belt transects were surveyed at 200, 400, and 600 **feet** around the perimeter of the survey corridor (exterior transects) for live tortoise and tortoise sign." Unless this is an unintended grammatical error, the protocol calls for surveys at 200, 400, and 600-**meter** intervals. If the surveys were truly performed at 200, 400, and 600 *feet*, the results would not satisfy the USFWS' requirement to seek tortoise sign out to about 1,970 feet (600 meters) in adjacent areas. I note that this unit error is repeated in all figures, so maybe they actually did survey 200, 400, and 600 *feet* rather than *meters*? It's worth inquiring.

4. I know in talking with you, you were concerned that the consultant applied the wrong number of tortoises to the USFWS equation for estimating densities of adult tortoises. I see at the bottom of page 5 in their report that they indicate they used only 60 of the 122 tortoises encountered, which included only those animals greater than or equal to 160 mm MCL within the action area, therefore excluding the animals smaller than 160 mm and found incidentally or on zone of influence transects.

I independently counted the number of tortoises ≥ 160 mm given in Table 1 excluding T97Z - T112Z on zone of influence transects and T113I – T122I found incidentally, and tallied 81 adult tortoises that should have been used in the formula. After making this count, I looked at your second file and see that we independently came up with the same number – 81 tortoises – that should have been used in the formula, rather than the 60 reportedly used in the calculation. So, I independently found the same thing you did.

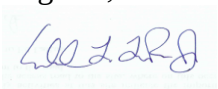
I didn't take the time (and am somewhat mathematically challenged, anyway) to plug the 81-number into the USFWS formula, but that is something you would certainly want to do to quantify the difference between using 60 adult animals and 81 in the calculation. Not sure if algebra works here, but I get the following:

$$\frac{119}{60} = \frac{X}{81} \quad \text{and, } X = 160$$

So, X = 160 adult tortoises rather than 119. Again, it would be better to plug 81 into the formula.

Hope this helps, and let me know if we can be of further assistance.

Regards,



Edward L., LaRue, Jr., M.S.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson