

HRT Review: Strings of Interest (SOI) Selection 2011

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Purpose: To collect a subset of turbine strings of interest for the SRC's review and validation of the 2007 HRT rankings possibly leading to an in person SRC field visit of selected strings.

Method: In order to get a collection of strings that would represent the possible effects of 2007 HRT turbine rankings and removals, data (fatalities, turbine status/ranking, and searches), as found in ICF data tables found online 1 June 2011, were split into two periods. Period 1 includes data from bird years October 1, 2005 through September 30, 2007 and Period 2 bird years October 1, 2007 through September 30, 2009. This information was used to produce supplemental tables and maps for 129 selected SOI's.

Tables: Because HRT turbine rankings and removals were designed to minimize target species fatalities, strings that averaged one or greater target species fatalities per year in either or both periods were selected for review. This method was intended to have a relatively low threshold for inclusion and assumes only a subset of these selected string will be of interest to the SRC. 129 strings were selected using the above criteria. Of these 129 strings, three collections were created which can be seen in tables 1 through 3. Table 1 shows strings that had an average of one or greater target species fatalities per year in Period 1 but less than an average of one per year in Period 2. Table 2 shows strings that had less than an average of one target species per year in Period 1 but had an average of one or greater target species fatalities per year in Period 2. Table 3 shows strings that had an average of one or greater target species fatalities per year in Period 1 and Period 2.

In order to facilitate discussion of string characteristics that may have affected these patterns of fatality the following fields were included in the supplemental tables 1 through 3 (data regarding turbine attributes and removals are as cited by ICF tables available online 1 June 2011):

- String Number: String identification number
- Company: Turbine company that owns strings
- Turbine Type: Turbine model occupying address
- # of turbine addresses: The maximum number of turbines that could be installed at the string.
- Max Capacity (kW): The maximum installed capacity of the string.
- 7 or greater 2007 HRT: String has 2007 HRT rankings of 7 or greater. (note: removal criteria are different for different companies please reference County Compliance report)
- 7 or greater 2010 HRT: String has 2010 HRT rankings of 7 or greater.

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- # of searches 2005-07: The number of fatality searches at the string in Period 1.
- # of searches 2008-09: The number of fatality searches at the string in Period 2.
- # of turbines 2005-07: The number of turbines installed during Period 1.
- # of turbines 2008-09: The number of turbines installed during Period 2.
- kW capacity Period 1: The sum capacity of the installed during Period 1.
- kW capacity Period 2: The sum capacity of the installed during Period 2.
- Current kW capacity: The most current installed capacity reported in the Monitoring Team Turbine data set (6/1/2011)
- 1AMKE, 1BUOW, 1GOEA, 1RTHA in Period 1 Total: Number of filtered target species fatalities that occur at the string in Period 1; October 1, 2005 through September 30, 2007
- 2AMKE, 2 BUOW, 2GOEA, 2RTHA in Period 2 Total: Number of filtered target species fatalities that occur at the string in Period 2; October 1, 2007 through September 30, 2009

Maps: To visualize turbine placement, ownership, removals, HRT rankings (Period 1 and Period 2) and focal species fatalities during the two Periods, AIC has produced maps to accompany the data tables (1-3 [M75, M76, and M77]) for the 129 SOI's. The maps are for SRC discussion only.