

#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

April 19, 2017

Mr. Adam Zerrenner Field Supervisor Fish and Wildlife Service 10711 Burnet Rd., Suite 200 Austin, TX 78758

SUBJECT: REPLY TO REQUEST FOR INFORMATION RELATED TO FOUR SPECIES OF FRESHWATER MUSSELS THAT ARE CANDIDATES FOR LISTING AS ENDANGERED OR THREATENED UNDER THE ENDANGERED SPECIES ACT

Dear Mr. Zerrenner:

The U.S. Nuclear Regulatory Commission (NRC) is in receipt of your letter dated March 1, 2017, regarding four species of freshwater mussels that the U.S. Fish and Wildlife Service (FWS) is currently reviewing to determine if listing these species as endangered or threatened under the Endangered Species Act of 1973, as amended (ESA), is warranted. The four species, false spike (*Fusconaia mitchelli*), Texas fatmucket (*Lampsilis bracteata*), Texas fawnsfoot (*Truncilla macrodon*), and Texas pimpleback (*Quadrula petrina*), are endemic to the Brazos, Colorado, and Guadalupe River basins in central Texas.

As part of its review of whether listing of these species is warranted, the FWS has requested information from its Federal partners, including the NRC, on available survey and distribution data; ongoing and planned activities within the range of the four species; the likelihood of future consultation if the species were to be listed; and conservation efforts currently being undertaken, among a list of other detailed requests.

The NRC has reviewed the nuclear power plants and other NRC-licensed, authorized, and proposed activities within the range of the four species and determined that it does not have information responsive to FWS's information requests. Although two operating nuclear plants are located in central Texas—Comanche Peak Nuclear Power Plant, Units 1 and 2 (Comanche Peak), in Glen Rose, Texas, and South Texas Project, Units 1 and 2 (South Texas), in Bay City, Texas—activities associated with these plants do not affect any of the four freshwater mussels.

Comanche Peak draws cooling water from Squaw Creek Reservoir. Although this reservoir lies near the Brazos River, its surface waters are not hydrologically connected to the river, and the reservoir itself would not provide suitable habitat for freshwater mussels. In May 2011, the NRC staff assessed the impacts to construct and operate two new reactors at the Comanche Peak site<sup>1</sup> and did not identify any records indicating that any of the four species of mussels occur at the site. However, the NRC staff determined that the proposed 345-kV transmission line rights-of-ways associated with construction of the two new reactors had the potential to cross habitat

<sup>&</sup>lt;sup>1</sup> Final Environmental Impact Statement for Combined Licenses (COLs) for Comanche Peak Nuclear Power Plant Units 3 and 4. NUREG–1937. May 2011. Available at <u>https://www.nrc.gov/reading-rm/doc-</u>collections/nuregs/staff/sr1943/.

for three of the mussels: Texas fawnsfoot, false spike, and smooth pimpleback. The NRC staff's assessment was based on descriptions of potential habitat or occurrences recorded by the Texas Parks and Wildlife Department. The NRC staff did not identify any studies undertaken specifically to determine the occurrence of freshwater mussels in the affected area. In November 2013, the applicant suspended the review for the new units at Comanche Peak. Therefore, no impacts to the four mussel species are expected.

South Texas draws cooling water from an onsite main cooling reservoir and intermittently draws make-up water from the lower Colorado River to replace water lost to evaporation and seepage. In 2013, the NRC staff assessed the environmental impacts of continued operation of South Texas during a 20-year license renewal term<sup>2</sup> and determined that the main cooling reservoir would be unsuitable habitat for freshwater mussels due to salinity levels and lack of flowing water. Additionally, the staff did not identify any records indicating that any of the four species of mussels occur in the lower Colorado River near the makeup water intake or discharge. The NRC has also assessed the environmental impacts of two additional nuclear reactors that would be constructed at the South Texas site.<sup>3</sup> During that review, the NRC staff also identified no information indicating the occurrence of any of the four freshwater mussels in areas that would be affected by the construction and operation of the new nuclear reactors.

Based on the above information, the NRC does not have any information relevant to the four freshwater mussels and does not anticipate that the FWS's potential future listing of these species or designation of critical habitat would necessitate ESA Section 7 consultation between the NRC and FWS. Similarly, the NRC does not have any relevant input regarding the additional questions listed in the FWS's March 1, 2017, letter.

Thank you for your coordination with the NRC related to your review of the false spike, Texas fatmucket, Texas fawnsfoot, and Texas pimpleback. The NRC appreciates receiving the information provided in your letter as well as the opportunity to comment. If you have any questions regarding this letter, please contact Ms. Briana Grange, Biologist, at 301-415-1042 or by e-mail at <u>briana.grange@nrc.gov</u> or Ms. Michelle Moser, Biologist, at 301-415-6509 or by email at <u>michelle.moser@nrc.gov</u>.

Sincerely,

/**RA**/

Jeffrey J. Rikhoff, Acting Chief Environmental Review and Project Management Branch Division of License Renewal Office of Nuclear Reactor Regulation

<sup>&</sup>lt;sup>2</sup> Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding South Texas Project, Units 1 and 2. NUREG–1437, Supplement 48. Final Report. November 2013. Available at <u>https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/supplement48/</u>.

<sup>&</sup>lt;sup>3</sup> Final Environmental Impact Statement for Combined Licenses (COLs) for South Texas Project Electric Generating Station Units 3 and 4. NUREG–1937. February 2011. Available at <u>https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1937/</u>.

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