MEETING NOTES

SOUTH CAROLINA ELECTRIC & GAS COMPANY Fisheries TWC Meeting

Final JJJ 09-01-16

September 1, 2016

ATTENDEES:

Bill Argentieri (SCE&G) Ray Ammarell (SCE&G) Brandon Stutts (SCANA) Caleb Gaston (SCANA) Henry Mealing (Kleinschmidt) Jordan Johnson (Kleinschmidt) Dick Christie (SCDNR) Bill Marshall (SCDNR) Ron Ahle (SCDNR) Fritz Rohde (NOAA) via conf. call Tom McCoy (USFWS) via conf. call

These notes serve as a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.

Henry opened the meeting with introductions and stated the purpose of the meeting was to review the Monticello Reservoir Habitat Enhancement Report and to finalize any Protection, Mitigation, and Enhancement (PM&E) measures associated with fluctuations of Monticello reservoir. Henry briefly reviewed the information presented in the Monticello Habitat Enhancement report and the origin of the proposed methodologies. Henry commented that SCE&G is no longer considering tree-felling as an enhancement type. Their primary concerns are: boater safety in the event a felled tree brakes away from the shoreline, numbers of trees available for felling in areas marked for enhancements, costs of continued maintenance over the course of the license.

Ron commented that he is concerned with the methodologies presented for spawning enhancements. His primary concerns are related to the durability and longevity of the proposed "kiddie pools." Ron asked if there were any documented reports of success using this methodology. Henry noted that there isn't any documentation and that different ideas and materials for spawning enhancements are open for discussion. Dick voiced his approval of the deep water and nursery enhancement methodologies. He added that SCDNR could investigate tree felling, noting that he thinks that with DNR consultation, it could still be a feasible enhancement. The group returned discussions to the spawning enhancements. Ron suggested that test plots should be tried within the reservoir before full implementation. He noted that SCE&G should monitor the success of the test plots and report back to the TWC.

Henry moved conversations over to the locations and types of structures proposed in the report. The group agreed with the proposed locations, with the caveat that SCDNR might want to fell trees in nursery areas. The group also approved the proposed structures for nursery and deepwater enhancements. Henry asked the group what they wanted in terms of timing of enhancement implementations. The group agreed that SCE&G should plan to install the proposed enhancements within 3 to 5 years after license issuance. Bill A. asked the group how to determine the success of



the structures. Henry recommended the use of underwater cameras. Dick added that you will see evidence of spawning in the spawning structures.

Henry asked the group to discuss spawning enhancements in more detail to try and determine a plan. The group agreed that the spawning enhancements might not be completed in the 5 years after license issuance. Henry commented that the report recommended installing 120 of the proposed 360 structures in the first year of the license and then monitoring for use. Henry suggested that the SCE&G should wait 2 years before revisiting the 120 structures and monitoring for use. Ron added that the structures should be monitored for structural integrity. There were concerns that the pools would not last the life of the license. Ray suggested that the group research manufacturers that produce materials intended for industrial use. The manufacturer could provide a materials list, allowing the group to estimate how long the pool will last. The group also concluded that the types of pools and mixtures of substrates used in the test plot should be varied in order to find the best combination and improve the chances for success. This can be addressed in revisions to the report.

Henry asked the group what would be done if the spawning structures don't work. Ron commented that the group should develop a contingency plan. Ray noted that if the 120 structure test plot fails, that will leave two-thirds of the budget to develop an alternative. Henry commented that the spawning enhancement portion of the PM&E will require an Adaptive Management Plan. Dick noted that the current approach is based on proven methods for spawning habitat enhancements used at the SCDNR hatcheries. The nursery and deepwater enhancements are both proven methods used across the US. Bill A. asked the group if the report should be amended to not suggest that every cove chosen for habitat enhancement should be included in the test plot. Dick noted that the adaptive management plan should state that the technical committee should determine which coves will be included in the test, allowing for flexibility in how the enhancements are implemented.

Caleb and Brandon asked the group if alternative structures that are aluminum could be used as a replacement for the pools. This would remove concerns of structural integrity over time. They also asked if there was a critical depth of pea gravel required in the spawning structures. Dick replied that he will ask hatchery workers for their recommendations. Bill M. asked if the spawning habitat markers in the maps presented in the report correspond to the number shown in the enhancement locations column of the enhancements costing table. Jordan replied that they did not. The report notes that 8 coves around Monticello are being considered for spawning enhancements. The locations denoted in the maps are potential specific locations within those coves defined as spawning habitat during the TWC site visit in May. Ron suggested that the spawning structures be arranged differently in each cove, depending on the target fish species. Ron also suggested that the spawning structures include varying substrate size and types to correspond with the preferences of a target species. Caleb and Henry note that the group could develop a matrix of materials to help with varying spawning structure types and substrate types around the reservoir. This will help the group determine the most effective combination that can be used in the initial test phase and final installation of all of the spawning structures. The group decided that the primary agency involved in the technical committee for enhancement implementation post license will be SCDNR. The group suggested that these points be added in the draft AMP.

The group briefly discussed potential permitting issues that may arise with the USACOE. Bill A. noted that any required permitting will be written into the PM&E measure.

The meeting adjourned. Action items from this meeting are listed below.



ACTION ITEMS:

- Kleinschmidt will edit the report to include comments made during the meeting and will redistribute to the group for approval. mid October
- Kleinschmidt will edit the map figures included in the report to clarify spawning enhancement areas, as well as add an overview of the coves eligible for enhancements around Monticello Reservoir. mid October
- Kleinschmidt will develop a draft AMP for the PM&E Measure. November
- Dick will consult with hatchery workers on critical gravel depths and gravel size mid October
- Caleb and Brandon will develop a multi-year installation schedule for the proposed enhancements. end of September
- Ron will research references that support the proposed enhancement methodologies mid October

