

Logan, Dennis

From: Logan, Dennis
Sent: Wednesday, February 24, 2010 4:17 PM
To: 'Steve.Duda@earthtech.com'; 'Dillard, Steve'
Attachments: 2.2.7.2 Terrestrial Species.doc; 2.2.5 Aquatic Resources.doc; 2.2.6 Terrestrial Resources.doc; 2.2.7 Threatened and Endangered Species.doc; 2.2.7.1 Aquatic Species.doc; 4.7.2 Terrestrial Species.doc; 4.5 Aquatic Resources.doc; 4.5.1 Entrainment.doc; 4.5.2 Impingement.doc; 4.5.3 Heat Shock.doc; 4.5.4 Total Impacts on Aquatic Resources.doc; 4.6 Terrestrial Resources.doc; 4.7 Threatened and Endangered Species.doc; 4.7.1 Aquatic Species.doc

Attached are our latest template files for the ecology sections.

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A-65

2.0 AFFECTED ENVIRONMENT

2.2 Affected Environment

2.2.7 Threatened and Endangered Species

2.2.7.2 Terrestrial Species

Insert relevant species descriptions (Generally, include any Federally listed species as well as any species that have specifically been documented on-site)

Table 2-XX. Listed Terrestrial Species. *The species below are Federally listed, State-listed, or both, as threatened, endangered, or candidate species. These species may occur on the Plant Name site or within the transmission line ROWs.*

Scientific Name	Common Name	Federal Status(a)	State Status(b)	Habitat
Reptiles and Amphibians				
Insects				
Birds				
Mammals				
Plants				

Scientific Name	Common Name	Federal Status(a)	State Status(b)	Habitat
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(a) DL = Delisted; E = Federally endangered; T = Federally threatened; - = No listing

(b) Insert State-specific abbreviations

Sources: Reference

2.0 AFFECTED ENVIRONMENT

2.2 Affected Environment

2.2.5 Aquatic Resources

Insert 2.2.5 Text (See guidance prepared by D. Logan on preparation of aquatic sections)

2.0 AFFECTED ENVIRONMENT

2.2 Affected Environment

2.2.6 Terrestrial Resources

Insert 2.2.6 Text (See guidance prepared by D. Logan on preparation of terrestrial sections)

2.0 AFFECTED ENVIRONMENT

2.2 Affected Environment

2.2.7 Threatened and Endangered Species

National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (FWS) are responsible for listing species as threatened and endangered at the Federal level, as delegated by the Endangered Species Act (ESA). The State may list additional species that are regionally threatened or endangered. Tables 2-11 and 2-12 lists threatened, endangered, or candidate species known to occur in County, in which Plant Name is located, or County(ies), through which transmission line ROWs associated with Plant Name traverse.

2.0 AFFECTED ENVIRONMENT

2.2 Affected Environment

2.2.7 Threatened and Endangered Species

2.2.7.1 Aquatic Species

Insert relevant species descriptions (Generally, include any Federally listed species as well as any species that have specifically been documented on-site)

Table 2-XX. Listed Aquatic Species. *The species below are Federally listed or State-listed as threatened, endangered, or candidate species. These species may occur on the Plant Name site, within the Water Body, or within the transmission line rights-of-way (ROWs).*

Scientific Name	Common Name	Federal Status(a)	State Status(b)
Fish			

Mussels			
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Scientific Name	Common Name	Federal Status(a)	State Status(b)
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(a) C = Candidate; E = Federally endangered; T = Federally threatened; - = No listing

(b) Insert State-specific abbreviations

Sources: Reference

4.0 ENVIRONMENTAL IMPACTS OF OPERATION

4.7 Threatened and Endangered Species

4.7.2 Terrestrial Species

Insert 4.7.2 Text and finding of impact

4.0 ENVIRONMENTAL IMPACTS OF OPERATION

4.5 Aquatic Resources

The issues related to aquatic resources applicable to Plant Name are discussed below and listed in Table 4-5. The staff did not identify any new and significant information related to any Category 1 issues during the review of the applicant's ER (Reference), the site audit, or the scoping process. Therefore, there are no impacts related to these Category 1 issues beyond those discussed in the GEIS. For these issues, the GEIS concludes that the impacts are SMALL, and additional site-specific mitigation measures are not likely to be warranted.

NOTE: Not all of the issues below will apply – only include issues in the table that apply to the specific plant.

Table 4-5. Aquatic Resources Issues. Section 2.1.6 of this report describes the Plant Name cooling water system; Section 2.2.5 describes the aquatic resources.

Issues	GEIS Section	Category
<i>For All Plants</i>		
Accumulation of contaminants in sediments or biota	4.2.1.2.4	1
Entrainment of phytoplankton and zooplankton	4.2.2.1.1	1
Cold shock	4.2.2.1.5	1
Thermal plume barrier to migrating fish	4.2.2.1.6	1
Distribution of aquatic organisms	4.2.2.1.6	1
Premature emergence of aquatic insects	4.2.2.1.7	1
Gas supersaturation (gas bubble disease)	4.2.2.1.8	1
Low dissolved oxygen in the discharge	4.2.2.1.9	1
Losses from predation, parasitism, and disease among organisms exposed to sublethal stresses	4.2.2.1.10	1
Simulation of nuisance organisms	4.2.2.1.11	1
<i>For Plants with Cooling-Tower-Based Heat Dissipation Systems</i>		
Entrainment of fish and shellfish in early life stages	4.3.3	1
Impingement of fish and shellfish	4.3.3	1
Heat Shock	4.3.3	1
<i>For Plants with Once-Through Heat Dissipation Systems</i>		
Entrainment of fish and shellfish in early life stages	4.1.2	2
Impingement of fish and shellfish	4.1.3	2
Heat shock	4.1.4	2

4.0 ENVIRONMENTAL IMPACTS OF OPERATION

4.5 Aquatic Resources

4.5.1 Entrainment

Insert 4.51 Text and Finding of Impact Level if applicable

4.0 ENVIRONMENTAL IMPACTS OF OPERATION

4.5 Aquatic Resources

4.5.2 Impingement

Insert 4.5.2 Text and Finding of Impact Level if applicable

4.0 ENVIRONMENTAL IMPACTS OF OPERATION

4.5 Aquatic Resources

4.5.3 Heat Shock

Insert 4.5.3 Text and Finding of Impact Level if applicable

4.0 ENVIRONMENTAL IMPACTS OF OPERATION

4.5 Aquatic Resources

4.5.4 Total Impacts on Aquatic Resources

Insert 4.5.4 Text and Finding of Impact Level if applicable

4.0 ENVIRONMENTAL IMPACTS OF OPERATION

4.6 Terrestrial Resources

The issues related to terrestrial resources applicable to Plant Name are listed in Table 4-6. There are no Category 2 issues related to terrestrial resources. The NRC did not identify any new and significant information during the review of the applicant's ER (Reference), the staff's site audit, the scoping process, or the evaluation of other available information. Therefore, there are no impacts related to these issues beyond those discussed in the GEIS. For these issues, the GEIS concluded that the impacts are SMALL, and additional site-specific mitigation measures are not likely to be sufficiently beneficial to warrant implementation.

Table 4-6. Terrestrial Resources Issues. Section 2.2.6 provides a description of the terrestrial resources at Plant Name and in the surrounding area.

Issues	GEIS Section	Category
Cooling tower impacts on crops and ornamental vegetation	4.3.4	1
Cooling tower impacts on native plants	4.3.5.1	1
Bird collisions with cooling towers	4.3.5.2	1
Power line right-of-way management (cutting herbicide application)	4.5.6.1	1
Bird collisions with power lines	4.5.6.1	1
Impacts of electromagnetic fields on flora and fauna (plants, agricultural crops, honeybees, wildlife, livestock)	4.5.6.3	1
Floodplains and wetland on power line right-of-way	4.5.7	1

4.0 ENVIRONMENTAL IMPACTS OF OPERATION

4.7 Threatened and Endangered Species

Threatened and endangered species is a site-specific, or Category 2 issue that requires consultation with the appropriate agencies to determine whether threatened or endangered species are present and whether they would be adversely affected by continued operation of Plant Name during the license renewal term. The characteristics and habitats of threatened and endangered species in the vicinity of the Plant Name site are discussed in Sections 2.2.6 and 2.2.7 of this draft SEIS.

Table 4-7. Threatened or Endangered Species. *Section 2.2.7 describes the threatened or endangered species on or near Plant Name .*

Issue	GEIS Section	Category
Threatened or endangered species	4.1	2

Insert descript. of NRC correspondence with FWS, NMFS, and State

4.0 ENVIRONMENTAL IMPACTS OF OPERATION

4.7 Threatened and Endangered Species

4.7.1 Aquatic Species

Insert 4.7.1 Text and finding of impact