4.0 POTENTIAL SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS

4.1 IMPACT ANALYSIS FRAMEWORK

4.1.1 Introduction

This Chapter assesses the potential impacts associated with the proposed construction and post-construction operation of CWWSs, focusing on potential significant adverse environmental (and socio-economic) impacts. It is based on the assumption that CWWSs are determined to be BTA to minimize adverse environmental impacts pursuant to § 704.5 of 6 NYCRR. Consequently, no further minimization or mitigation with respect to I&E is considered in this ER, although limited summary discussion of relevant conclusions from Entergy's engineering feasibility and efficacy analysis is referenced. The SEQRA-mandated alternatives analysis will be performed in a subsequent ER, as noted in Chapter 1.0.

The total duration for complete Project implementation is projected to be less than six years. A Project schedule has been developed by ENERCON with assumed start and finish dates as shown in Figure 2.5-2 (Preliminary Construction Schedule). In-river work would be performed over three successive construction seasons during the four-year construction schedule, i.e., from about March through November in each of those three years, and in the last year, tie-in of the second Unit is expected to be completed (the first one having been completed by year two).

A detailed description of the proposed CWWS construction methods and equipment is presented in Section 2.5, but optimization of this construction approach may occur during the permitting process; as a result, this analysis considers reasonably foreseeable permit-related evolutions. The processes presented therefore represent the most likely scenario for construction of the Project, although it is recognized that the specific techniques that may eventually be used may vary to some degree as a result of construction-optimization or permitting. It is expected that the potential significant adverse environmental impacts identified in this ER, and any conclusions based thereon, would remain the same, be similar to or be reduced, notwithstanding any such modifications.

The impact analyses do not address certain, off-site construction-related considerations. Those considerations include: off-site construction staging locations for the barges typically developed in consultation with the USCG and USACE; dredged material disposal sites, which cannot be determined until materials are tested and evaluated for contaminants (although the typical range of contaminants is addressed in this ER based on significant historical technical analysis of sediment in the vicinity of IPEC); and off-site locations for construction-related fabrication of CWWS system components although it is expected that facilities that undertake this work would be fully authorized to do so. Construction contracts issued for the Project would require the contractor(s) to comply with all applicable environmental regulations and to obtain all necessary approvals and permits from the requisite federal, state and local regulatory agencies, providing additional assurances that potential adverse environmental impacts are minimized.

Following construction of the CWWS, IPEC operations would remain essentially the same, e.g., IPEC would continue to withdraw water from and discharge water to the Hudson River subject to and with the benefit of its SPDES Permit. In addition, IPEC would continue to generate electricity as a base load facility with a small air quality and carbon footprint. The existing CWIS