

UNITED STATES OF AMERICA
BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

**FINAL APPLICATION FOR NEW LICENSE FOR MAJOR PROJECT -
EXISTING DAM**

**EXHIBIT C – CONSTRUCTION
HISTORY / PROPOSED
CONSTRUCTION**

Prepared by:

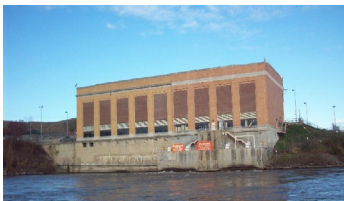
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**CRESCENT HYDROELECTRIC PROJECT
RELICENSING**

FERC NO. 4678



**NY Power
Authority**

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1 Introduction

The Crescent Hydroelectric Project (Project) (FERC No. 4678) is an 11.8 MW conventional hydroelectric project located on the Mohawk River, approximately 4 miles upstream from its confluence with the Hudson River. The Crescent Project is located in Saratoga, Albany, and Schenectady Counties, New York, and in the towns of Waterford, Colonie, Halfmoon, Clifton Park, and Niskayuna. The Project is owned and operated by the Power Authority of the State of New York (d/b/a “New York Power Authority” and referred to as “the Power Authority”).

This exhibit is required under the Federal Energy Regulatory Commission (FERC) regulations which can be found in Title 18 of the Code of Federal Regulations (CFR), Sections 4.51(d) and 5.18(a)(5)(iii). The information provided herein covers the specifics prescribed for Exhibit C and serves the purpose of providing the construction history of the Project.

2 Construction History (18 CFR Section 4.51(d)(1))

2.1 Original Construction and Modifications

Because this Application is not for an initial license, a “tabulated chronology of construction for the existing project structures” is not required under Section 4.51(d)(1) of the Commission’s regulations.

By way of overview, the Crescent Project dam was designed in 1907. Construction of the dam was completed in 1914 as part of the extensive modifications made to upgrade the original Erie Canal. These modifications allowed canal traffic to navigate on the Mohawk River, except where channels were constructed to bypass natural barriers. Cohoes Falls, an 80-foot-high set of falls located about 1.5 miles downstream from Crescent Dam, prevented direct navigation between the Mohawk and Hudson Rivers.

In 1916, hydropower was harnessed at the site. The original powerhouse was located at the east end of Dam A and was dismantled ca. 1927 when a power line was strung across the river from a newly built, larger powerhouse to take its place. This current powerhouse, located on the western bank, was built in 1925 (Figure 2-1) and the two original Francis units, Units 1 and 2, were installed in 1925. In 1990, the powerhouse was expanded to include the two Kaplan units, Units 3 and 4. Following the installation of the new Kaplan units, the original Francis units, Units 1 and 2, were refurbished in 1993. Table 2-1 provides a chronology of Project construction and modifications.

Figure 2-1 Major Project Facilities of the Crescent Project

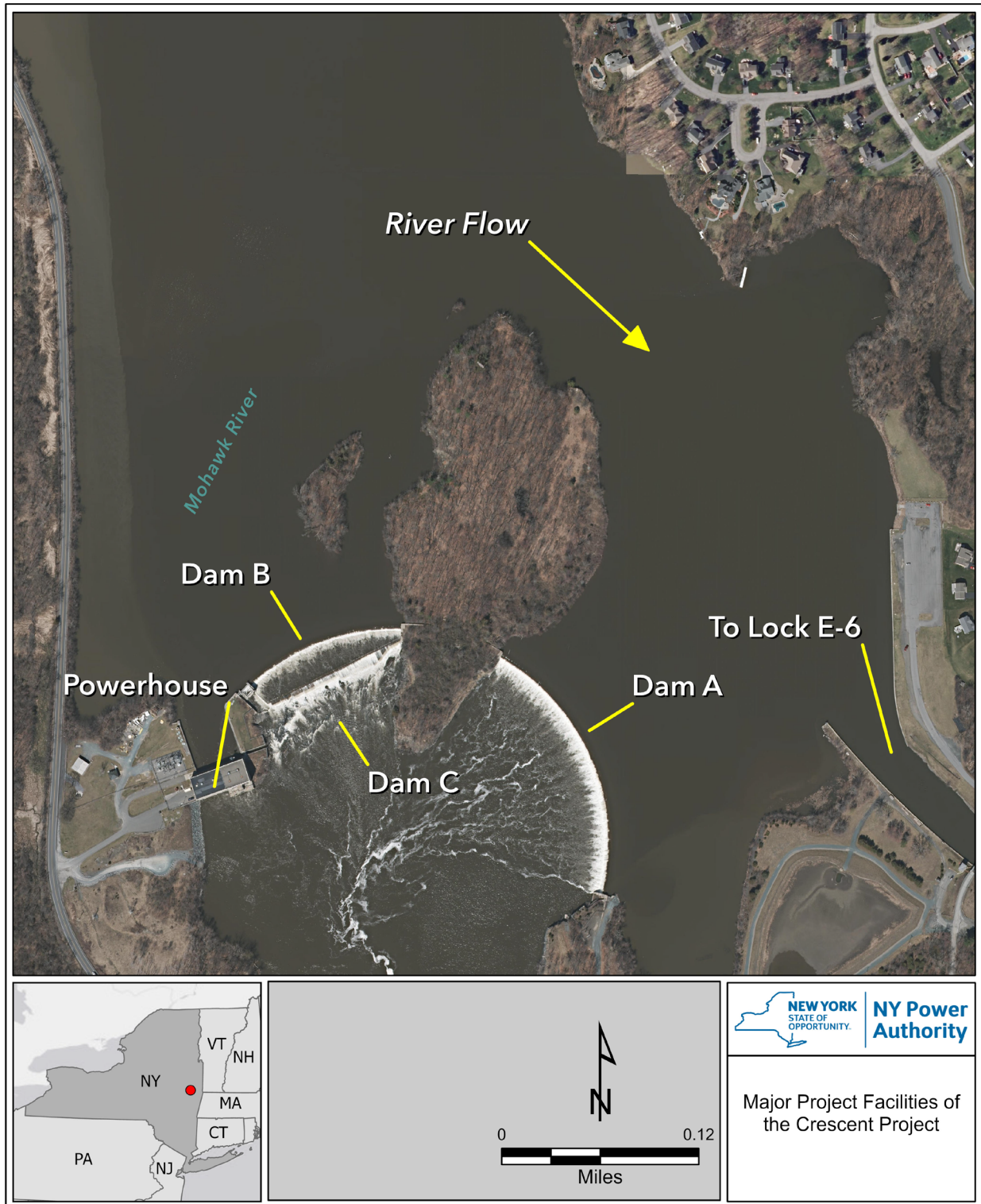


Table 2-1 Chronology of the Crescent Hydroelectric Project Construction and Modifications

Event	Date
Design and Construction of the Crescent Dam	1907-1914
Hydropower harnessed at the Crescent Hydroelectric Project	1916
Current powerhouse, located on the western bank, was built	1925
Original powerhouse dismantled (located at east end of Dam A)	1927
Powerhouse expanded (to include the two Kaplan units, Units 3 and 4)	1990
Overhaul of the two original Francis turbine-generators, Units 1 and 2	1993
The two Kaplan turbines were refurbished as part of a Life Extension and Modernizations project. In addition, Turbine generator control equipment was upgraded for all units.	2017

2.2 Project Schedule for New Development (18 CFR Section 4.51(d)(2))

The Power Authority does not propose any new development for the Crescent Project as part of this Application. Accordingly, Section 4.51(d)(2) of the Commission's regulations do not require a proposed schedule for post-relicensing construction.