Signature of the Keeper

OMB No. 1024-0018

United States Department of the Interior National Park Service

National Register of Historic Places Registration Form

RE	(Expires 5/31/2012)
	JAN 04 2013
NAT. P	ECOTOR OF HISTORIC PLACES

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. **Place additional certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a)**.

1. Name of Pro			Johnnen								
historic name	Schoellkop	of Power	- Statio	n No. 3 Sit	e						
other names/site					wer & Manu	facturing	Co. Pov	er Stati	on (188	31-191	10).
											Station 3 (1918-1927)
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2. Location									-		
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city or town Nia	agara Falls										vicinity
state New Yor		code	NY	county	Niagara		code	063	zip c	code	14303
3. State/Federal	Agency Ce	ertificat	ion								50
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State or Federal ag	ency/bureau o	r Tribal Go	overnme	nt							
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Signature of commo	enting official						Date				
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Title					State or Fed	eral agenc	cy/bureau	or Tribal	Govern	ment	
4. National Pa	rk Service	Certific	ation								
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other (expl	ain:)	54		ł	-	2	120	13	>		

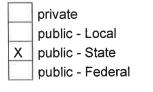
Date of Action

Schoellkopf Power Station 3 Site

Name of Property

5. Classification

Ownership of Property (Check as many boxes as apply.) Category of Property (Check only one box.)



	building(s)
	district
Х	site
	structure
	object
	4 ,

Number of Resources within Property

(Do not include previously listed resources in the count.)

ContributingNoncontributing00buildings00district10site30structure

0

0

Name of related multiple property listing

(Enter "N/A" if property is not part of a multiple property listing)

Number of contributing resources previously listed in the National Register

1 [site is within the Niagara Reservation NHL]

N/A

6. Function or Use

Historic Functions

(Enter categories from instructions.)

INDUSTRIAL/energy facility

Current Functions

(Enter categories from instructions.)

(Entor enterance from instructions.)

VACANT/not in use

Materials

0

4

7. Description

Architectural Classification (Enter categories from instructions.)

NA

	alegones nom mondonolo
founda	tion:
walls:	i
roof:	
other:	Limestone, dolostone, sandstone, steel

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object

Total

Niagara, NY County and State

Schoellkopf Power Station 3 Site Name of Property Niagara, NY County and State

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Narrative Description

(Describe the historic and current physical appearance of the property. Explain contributing and noncontributing resources if necessary. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, setting, size, and significant features.)

The site of the former Schoellkopf Power Station is located on the east bank of the Niagara River in the City of Niagara Falls, Niagara County, New York.¹ The Schoellkopf Power Station formerly consisted of two levels: the lower level within the Niagara Gorge, composed of three hydro-electric powerhouses (Powerhouses 3A, 3B, and 3C) built between 1905 and 1924, and the upper level above the gorge, where there were a variety of station offices and forebays. A massive stone wall was erected between 1908 and 1910 along the face of the gorge in order to conceal the penstocks rising above Powerhouse 3A. A rockslide on June 7, 1956 engulfed Powerhouses 3B and 3C, after which both were demolished. By early 1957, Powerhouse 3A was repaired, the site partially cleaned up, and the power station was able to supply power once again. On October 1, 1961 operations at the Schoellkopf Power Station ceased, and in 1962 Powerhouse 3A and the other facilities at the top of the gorge were demolished, thus creating the present one-level Schoellkopf Power Station site within the gorge.² Today the 5.2-acre site of the Schoellkopf Power Station is defined as a single contributing site encompassing features related to the 1956 collapse and the power station's subsequent stabilization and demolition of remaining features between 1956 and 1962. Within the site are three additional contributing structures that survive with sufficient integrity to represent the earlier history of the site. They are the stone wall concealing the Powerhouse 3A penstocks (which incorporates the sealed penstocks behind the wall); the elevator shaft running between the upper and lower levels of the station site; and the tailraces for Powerhouse 3A, which were filled in as part of the cleanup project but remain otherwise intact. The site is best viewed from the Ontario, Canada side of the Niagara Gorge and may also be accessed on foot from a pedestrian path leading north from the Rainbow Bridge that follows the eastern rim of the gorge and terminates at the south end of the site. A second footpath leads from the Niagara Gorge Discovery Center northward and then switches back to the northwest corner of the site within the gorge. Both of these trails have limited public access and are maintained by the New York State Office of Parks, Recreation, and Historic Preservation.

Narrative Description

The site of the former Schoellkopf Power Station is located on the east bank of the Niagara River approximately 1,600 feet north of the Rainbow Bridge, in the northwestern section of the city of Niagara Falls, New York.

¹ The Schoellkopf Power Station discussed in this nomination was the third power station built by the Niagara Falls Hydroelectric Power and Manufacturing Company. While known as Schoellkopf Station No. 3 when it was built, it was commonly known as Schoellkopf Power Station and is referred as such in this document.

² The land atop the gorge was used for the last section of the Robert Moses parkway and is not included in the nomination.

Schoellkopf Power Station 3 Site Name of Property (Expires 5/31/2012)

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The site is located within the Niagara Gorge and is completely within the boundaries of the Niagara Reservation, a New York state park that was designated a National Historic Landmark in 1963. Despite its location within the NHL, the period and areas of significance for the nominated site are completely different, and the power plant site was not evaluated in the NHL documentation. The nomination boundaries were chosen to encompass the full extent of the power station site on the east and west. The north boundary was drawn along the top of the gorge and the south boundary is the east bank of the Niagara River.

Occupying approximately 5.2 acres, the nominated property consists of rocky terrain with some tree and shrub growth within the Niagara Gorge at an elevation of 361.0 feet and a lookout platform atop the former elevator shaft at the top of the gorge, at an elevation of 565.0 feet. The Schoellkopf Power Station formerly consisted of two levels: the lower level within the gorge and along the Niagara River is the former location of Powerhouse 3A (built 1905-1914), Powerhouse 3B (built 1918-1920), and Powerhouse 3C (built 1921-1924) along with their associated turbines, generator buildings, and tailraces. Rising above the former site of Powerhouse 3A, which is articulated by a concrete pad atop the buried remains of the former generator gallery, is a stone wall built 1908-1910 to conceal the station's penstocks. Facilities for the power station, including the terminal buildings, hydraulic canal, ice run, pressure tunnel and office buildings, were formerly located at the top of the cliff on the station's upper level.

A rockslide on June 7, 1956 engulfed Powerhouses 3B and 3C, both of which were subsequently demolished tp the extent feasible. In 1962, the still-standing Powerhouse 3A and the facilities at the top of the gorge also were demolished, thus creating the present one-level Schoellkopf Power Station site, with only the remains of a few structures rising from the bottom of the gorge. During the demolition of the site, the generators and turbines from Powerhouse 3A were salvaged and either reused in Buffalo and Canada, returned to their owners, or sold for scrap metal. The building materials from the facilities on the upper level were removed and either sold or dumped as fill into the abandoned hydraulic canal and spillway.

The nominated parcel also contains intact buried deposits from the 1905-1924 building period, including hydroelectric turbines, generators, and other machinery *in situ* from Powerhouses 3B and 3C. The information value of these intact remains is unknown; however, excellent written documents, drawings, and historic photographs provide detailed information about the specifications of the equipment, how the machinery functioned within the station, and their role within the engineering history of hydro-electric power.

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Contributing Site: Ruins of Schoellkopf Power Stations 3B and 3C (1918-1957) Photos 1, 2, 6-8, 13-16, 19-24 Map Key 1, 2, 6-8, 13-16

Engineer: John L. Harper (Original Construction), Uhl, Hall & Rich (Stabilization, Demolition)

After the June 7, 1956 collapse, a few components of Powerhouses 3B and 3C remained, while the salvageable steel framing and machinery were removed. Rather than removing the material from the gorge, the existing rubble was used to grade the site and fill was deposited into the Niagara River in front of the tailraces. The six tailraces for Powerhouse 3B (1918-1920) are located at a site beneath the former powerhouse. Constructed of 3-foot-thick reinforced concrete walls, the tailraces spanned the length of the 212-foot-long powerhouse building and are topped with natural stone facing.³ The six tailraces for Powerhouse 3C (1921-24) are located at a site beneath the former powerhouse. Constructed of 4-foot-thick reinforced concrete walls, the tailraces spanned the length of the 240-foot-long powerhouse building and are topped with natural stone facing. Each tailrace is approximately 25-feet-wide and features a flat roof. The tops of the tailrace structures are covered with *in situ* machinery which was deemed impractical to salvage, as well as stone-and-rubble fill deposited here as a result of the 1956 collapse of Powerhouses 3B and 3C and the subsequent 1956-57 demolition.⁴

Also still extant on the site are the partial remains of the ca. 1920 ice run. The construction of Powerhouse 3B required the enlargement of the ice run to allow for removal of ice from the enlarged hydraulic canal basin. The ice run is constructed of concrete and is 15 feet wide. It ran down into the gorge at a steep angle behind Powerhouse 3B and underneath the building between the first generator and its north wall.⁵ The exterior of the ice run was covered with dolostone and fieldstone to match the stone wall and elevator shaft, although this was removed during the 1962 demolition and only the open portion at the top of the gorge is extant.

On top of the ice run is part of the control building built as part of Power Station 3B.⁶ Steel-framed and faced with dolostone and fieldstone, as were the other buildings, the building was demolished to the existing grade level, which left a 66' x 8" section below grade facing the gorge above the ruins of the ice run.⁷ North of the ice run is a carved section of rock which was used to support a retaining wall between the control building and the

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³ Uhl, Hall & Rich, Incidental Niagara Power Facilities: Schoellkopf Interchange & Demolition-Station_3B (December 1961).

⁴ Uhl, Hall & Rich, Incidental Niagara Power Facilities: Schoellkopf Interchange & Demolition-Station 3C (December 1961).

⁵ John L. Harper (Chief Engineer), Station No. 3 Extension (August 1920).

⁶ The term power station refers to the entire complex as they were built including the powerhouse, forebays, and ancillary buildings.

⁷ Uhl, Hall & Rich, Incidental Niagara Power Facilities: Control Building First Floor Plan (December 1961).

Schoellkopf Power Station 3 Site Name of Property

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terminal building.⁸ This was exposed after the collapse. After the terminal building was allowed to fall into the gorge in 1956, remnants of the foundation and a retaining wall to the north were left at the top of the cliff wall.

In 1956, during the rehabilitation of Powerhouse 3A, Niagara Mohawk elected to use the 1920-1922 tunnel constructed for Station 3C to provide the water for Station 3A instead of the hydraulic canal that had previously powered Stations 3A and 3B. As the tunnel was unlined carved rock, a spillway was built to flow over the location of Powerhouse 3C to alleviate the pressure and seepage into the bedrock so as not to cause another rockslide.⁹ Filled in along with the rest of the site in 1962, only the wing walls of the spillway can be found at the cliff's edge at the top of the gorge.

Contributing Structures

 Stone Wall (1908-1910¹⁰) 1 contributing structure
 Photos 3, 4, 5, 17-19, 21-24, Map Key 3, 4, 5

 Chief Engineer: John L. Harper (Drawing dated 1911)
 Photos 3, 4, 5, 17-19, 21-24, Map Key 3, 4, 5

The stone wall was erected to conceal the penstocks leading from the forebay to Powerhouse 3A as part of a beautification measure at the Schoellkopf Power Station recommended by Secretary of War William Howard Taft and overseen by the Taft Beautification Commission in 1907.¹¹ The top tier (Tier 1) has a height of 18.25 feet and although it appears to be a retaining wall, it originally served as the west bearing wall for Gatehouse 3A with the small walkway on top used as an observation deck. Seen from above, Tier 1 has three 13-foot projections beyond the west face of the wall. These projections are the remaining evidence of wire towers and an office building that were integrated into the Gatehouse 3A structure. The Tier 1 walls are approximately 2-feet, 6-inches thick and are comprised of dolostone and limestone cut in approximately 1-foot by 1-foot dimensions. The original cross section drawings indicate that there are two wythes of block between the front and back faces of the wall. ¹²

The bottom tier (Tier 2) is the stone facing placed in front of the east wall of the gorge to cover the penstocks and varies in height between approximately 76.75-feet and 142.75-feet. The horizontal distance between the

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⁸ Edward T. Williams, Niagara Falls and the Electrical Age (n.p., 1900), 6.

⁹ "New York Power to Flow Early '57," Niagara Review, 4 September 1956,4.

¹⁰ The date is based on a historic photograph entitled "Construction of Powerhouse 3A including Stone Wall, Penstocks, and Elevator Shaft" showing the wall when it was 90 percent complete (June 8, 1910)

¹¹ On January 18, 1907, Secretary of War Taft rendered a decision under the 1906 Burton Act for the preservation of Niagara Falls on the applications of American companies for the use of water and of Canadian companies wishing to send electric power into the United States, and at the same time announced the appointment of a commission to beautify the vicinity of the Falls (Archer Butler Hulbert, 1908, 116). ¹² John L. Harper (Chief Engineer), *Section of Station No. 3* (June 1911).

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two tiers varies between approximately 14 feet and 36.5 feet and constitutes the pedestrian landing, which once served as an outdoor dining area. The Tier 2 wall is approximately 4 feet thick and the distance between the back face of the wall and the rock face of the gorge varies along the alignment from approximately 14 feet to 23.5 feet and is closer to the rock face on the south and north ends. The rock consists of dolostone and limestone blocks of various sizes with larger blocks having dimensions of approximately 3 feet by 2 feet.¹³ Cross section drawings which display the wall face, penstocks, and concrete surrounding the penstocks, depict three wythes of block between the front and back faces of the wall.

In plan, the Tier 2 wall begins at its south end where it intersects the old elevator shaft. This section on the south end, in front of Penstock Number 1, cuts across the corner between the north face of the elevator shaft and the remainder of the stone wall face. Moving north along the face is an 80-foot-long straight length of wall that is followed by a 300-foot-long, slightly curved section following the alignment of the cliff wall downstream. The north end of the wall face is stepped into the cliff face as it turns eastward and meets the gorge rock face. The stone wall is in good condition, shows little sign of wear since its construction, and has retained integrity.

Between the south and north end and behind the stone wall, and considered an integral part of it, are the remains of fifteen steel penstocks constructed between 1905 and 1908 (numbered 1 at the south end and 15 at the north end). ¹⁴ There are also cavities for the four aluminum wire towers (denoted "A" at the south end, "B" and "D" in the center, and "C" on the north end of 1961 plan drawings).¹⁵ Thirteen of the penstocks have diameters of 9 feet, while penstocks 3 and 8 are smaller with 5-foot diameters. Totaling 212 feet of head, each penstock would exit the forebay horizontally, drop vertically 204 feet to the power station turbine room below, turn horizontally to enter the room, and then turn vertically to drop an additional 8 feet into the turbines. The penstocks are encased in concrete, which extends approximately 1.5 feet past the north and south edges of the penstocks. The penstock openings were sealed with concrete block in 1962 at the back wall of the turbine room. Except in the area of the wire towers, the cavity between the penstocks is 14.5-feet-long. The cavities for wire towers "A", "B", and "D" are 16.5-feet-long and the cavity for wire tower "C" is 14.5-feet-long.¹⁶

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¹³ Kenneth L. Fishman, *Preliminary Evaluation of the Existing Stone Wall* (Buffalo, NY: 2000), 8.

¹⁴ Edward Dean Adams, Niagara Power: History of the Niagara Falls Power Company (Niagara Falls: NY, 1927), 78.

¹⁵ Uhl, Hall & Rich, Incidental Niagara Power Facilities: Schoellkopf Interchange & Demolition-High Bank Wall (December 1961).

¹⁶ Fishman, 10.

Niagara, NY County and State

Elevator Shaft (ca. 1910¹⁷) 1 contributing structure Photos 6-8, 17-24, Map Key 6-8 Engineer: John L. Harper (Drawing dated 1911)

At the southern end of the stone wall is the former elevator shaft, on top of which is an observation deck built after 1962 and currently used for viewing the Niagara Gorge. Constructed to provide access to Powerhouse 3A and for the power cables to travel from the station to the facilities at the top of the gorge, it extends 40 feet beyond the west edge of the cliff. The elevator shaft housed 24 electrical cables and carried two, 4,000-pound capacity elevators down to a deck area 204 feet below in the gorge.¹⁸ Constructed of reinforced concrete and faced with dolostone and limestone, the shaft is the only feature that remains, as the elevators, machinery, and cables were removed during the 1962 demolition of the Schoellkopf Power Station. At that time the shelter house above the shaft was demolished, the present reinforced concrete landing created, and the windows on the south elevation filled in with glass block.¹⁹

<u>Powerhouse 3A Tailraces (1908-1910²⁰) 1 contributing structure</u> Photos 1-4, 9-12, 18, 19, 21-24 <u>Map Key 1-4, 9-12</u>

Engineer: John L. Harper (Drawing dated 1911)

The fifteen tailraces for Powerhouse 3A are located at a site beneath the former powerhouse. The tailraces servicing Units 1 and 2 were closed after the June 7, 1956 collapse when the rockslide damaged the machinery in the powerhouse by collapsing the roof of the turbine hall and generator room.²¹ Constructed of 3-foot-thick reinforced concrete walls, the tailraces spanned the length of the 472-foot-long powerhouse building and have natural stone facing above the openings. Each tailrace is approximately 14-feet-wide and features a segmental-arched roof. Water was pushed through using Moody Twin Discharge Design Draft Tubes, as evidenced by the two round holes at the back of the tailrace.²² The tops of the tailrace structures are covered with stone-and-rubble fill deposited during the 1962 demolition of Powerhouse 3A and extend eastward from the top of the tailrace to the base of the stone wall. Reinforced concrete piers along the exterior are clad with steel.

¹⁷ The date is based on an historic photograph entitled "Photograph of Construction of Powerhouse 3A including Stone Wall, Penstocks, and Elevator Shaft." (June 8, 1910)

¹⁸ Fishman, 11.

¹⁹ Uhl, Hall & Rich, *Incidental Niagara Power Facilities: Schoellkopf Interchange & Demolition-Elevator Tower* (December 1961). ²⁰ Fishman, 8.

²¹ "New York Power to Flow Early '57," Niagara Review, 4 September 1956:4.

²² Harper, Section of Station No. 3.

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NPS Form 10-900	OMB No. 1024-0018

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

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Α

В

Property is associated with events that have made a significant contribution to the broad patterns of our history.

- Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
 - Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

D

	A	Owned by a religious institution or used for religious purposes.
	в	removed from its original location.
	с	a birthplace or grave.
	D	a cemetery.
	Е	a reconstructed building, object, or structure.
	F	a commemorative property.
	G	less than 50 years old or achieving significance within the past 50 years.

(Expires 5/31/2012)

Niagara, NY County and State

Areas of Significance

(Enter categories from instructions.)

INDUSTRY

Period of Significance

1956-1962; 1908-1910

Significant Dates

June 7, 1956

Significant Person

(Complete only if Criterion B is marked above.)

N/A

Cultural Affiliation

N/A

Architect/Builder

Harper, John L. (Chief Engineer)

Period of Significance (justification)

(Expires 5/31/2012)

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The period of significance (1956-1962) encompasses the significant events associated with the collapse of the power plant on June 7, 1956 (collapse of Powerhouses 3B and 3C and the consequent loss of power to western New York State); the immediate aftermath of the collapse and clean-up of the site between 1956 and 1961(including the decision not to rebuild the Schoellkopf Power Station); and the 1962 demolition of the remainder of the Schoellkopf Power Station site as part of Robert Moses's plans for the Niagara Power Project and the integration of this site within the Niagara Reservation. In addition, there are three contributing resources that retain significance from an earlier period: the stone wall built 1908-1910 to screen the penstocks of Schoellkopf Powerhouse 3A, the elevator shaft, built 1910, and the powerhouse 3A tailraces (1908-1910). These features represent early attempts at ameliorating the effects of an existing industrial site at Niagara Falls, following the recommendations of Secretary of War William Howard Taff's Beautification Commission.

Criteria Considerations (explanation, if necessary)

N/A

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance and applicable criteria.)

The Schoellkopf Power Station Site is significant for its association with the dramatic events of June 7, 1956, when water seeping into its back wall precipitated the spectacular collapse of the southern two-thirds of the station (Powerhouses 3B and 3C) into the Niagara River gorge. The disaster caused approximately \$20 million (approximately \$168 million in 2012 dollars) in damages, with its most immediate consequence being the loss of 450,000 kilowatts of power from the New York State power grid. The remains of Stations 3B and 3C were allowed to topple into the gorge or were razed soon after, creating the present site and leaving Schoellkopf Station 3A still operating, but at reduced capacity, for the next five years. In addition to its immediate effects, the disaster was the major impetus for Congressional passage of the 1957 Niagara Redevelopment Act, which cleared the way to grant a federal license to the Power Authority of the State of New York (now New York Power Authority or NYPA) to build and operate the Niagara Power Project (NPP), a massive hydro-electric power station and reservoir complex that was significantly larger than the Schoellkopf station. Passage of this act is considered the culmination of the long effort to place public utilities in the hands of government agencies rather than consign them to private, profit-making power companies, a movement that had begun as early as

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1907, when New York Governor Charles Evans Hughes sought legislative support for a plan to restore control of New York's waterpower to the people. The New York Power Authority's completion of the Niagara Power Project in 1961 marked the end of exclusive private ownership of hydro-electric power generation at Niagara Falls. Powerhouse 3A subsequently ceased operation and was demolished in 1962 as part of Robert Moses's

beautification efforts along the American side of the Niagara River, leaving only a stone wall constructed as part of a much earlier 1908-1910 beautification effort. Two other early industrial features (the elevator shaft and the powerhouse 3A tailraces) were also part of the 1908-1910 project.

Narrative Statement of Significance (Provide at least one paragraph for each area of significance.)

1. Early History of Hydro-Electric Power at Niagara Falls (1847-1905)

The first known effort to harness the water power of the Niagara Falls for industrial use was in 1759, when the Frenchman Chabert Joncaire built a small loop canal upriver from the falls to power a sawmill.²³ Between 1805 and 1816, Augustus Porter and his brother, Peter Porter, purchased this area and all of the American Falls from New York State and enlarged the original canal to provide hydraulic power for their gristmill and tannery. In 1825, the brothers issued "An Invitation to Eastern Capitalists and Manufacturers" to develop power at Niagara Falls.²⁴ In 1826, the upper raceway was extended and in 1845 the lower raceway near Goat Island was constructed; the latter was used by a paper mill and nail manufactory among other enterprises.²⁵ In 1847, Augustus Porter developed a plan for a hydraulic canal running from Port Day, above the rapids of the falls, to the edge of the Niagara Gorge downstream, where power would be available from the fall of water from the "High Bank" about 210 feet to the river below.²⁶ Due to a lack of funds, the partially completed canal and water rights were sold in 1860 to Horace Day, who, in 1861, completed the canal to a 35-foot width and 8-foot depth. Its technology was underutilized for many years, as the turbines used in the mills at that time were not strong enough to use the falls' full 210-foot head.²⁷ In 1877, the canal, land, and water rights were purchased for \$76,000 by Buffalo industrialist Jacob F. Schoellkopf who, along with his son, Arthur, organized the Niagara Falls Hydraulic Power and Manufacturing Company (NFHP&M) in 1878 and proceeded to enlarge the canal.

²³ Edward Dean Adams, Niagara Power: History of the Niagara Falls Power Company 1886-1918, Vol. 1, 1927, 41,

²⁴ Ibid., 46.

²⁵ Ibid, 47.

²⁶ Harper and Johnson, 882.

²⁷ Edward T. Williams, Niagara Falls and the Electrical Age (n.p., 1900), 21-22.

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In 1881, the first hydro-electric power generation station in Niagara Falls was established on the hydraulic canal to supply electricity for commercial purposes. Eventually known as Schoellkopf Station No. 1, the power station was located in what was then known as Quigley's Mill, later the Cliff Paper Company Mill (demolished ca. 1935) in the gorge approximately 1,000 feet upstream from what would be Schoellkopf Power Station 3A.²⁸ In 1881, the Brush Electric Light Company drove one of its generators by a belt from the mill shaft and supplied direct current (DC) power for sixteen arc lights in the streets and stores of the city. Through the Brush Electric Light Company's generator, Schoellkopf Station No. 1 powered Quigley's Mill, several small factories and stores, the street railway, the *Niagara Falls Gazette* offices and an arc light machine owned by the Brush Electric Light and Power Company. The use of hydro-electric power to light the arc light machine was the first public distribution of electricity at Niagara Falls, and it stimulated the development of electrical power in general at Niagara Falls.²⁹

The NFHP&M supplied electricity to manufacturers within a one-mile radius, since that was the effective limitation of the transmission of direct current. The generators installed were of various makes, depending upon the industries to which they were supplying power. Alternating current (AC) electricity, unlike direct current, can be transformed from one potential to another, to a higher or lower electromotive force, through the means of static transformers and ultimately became more popular. As AC-driven machinery became more commonplace in industry, the demand increased and the NFHP&M added generators to produce alternating current.

In 1896, the NFHP&M constructed its Power Station No. 2 (demolished in 1925) at the water's edge within the gorge in order to use the full available head of 210 feet. The first section of full-head development proved so successful that two more stone-and-steel sections of the station were built by 1904 in the vacant area adjacent to Station No. 1, making the station 170-feet long by 100-feet wide.³⁰ The equipment consisted of four turbines, generating 90 percent DC power and 10 percent AC power for long distance power distribution. (The DC power was needed due to the large numbers of DC motors in use in various industries at that time). The higher AC frequency was used for general lighting purposes to avoid lamp flicker, and the lower frequency was used for large, slow-speed industrial induction motors. In terms of their power capacity, the Schoellkopf Power Station penstocks were the largest in the world.³¹ After the construction of Power Station No. 2, the Pittsburgh

 $^{^{28}}$ Quigley's Mill was constructed before the expansion of the canal, thus the location of Station No. 1 prevented the utilization of the full head of the canal. 29 Educated Deep A deepe Minerez Prevent Universe Falls, NY, 1927), 80

²⁹ Edward Dean Adams, *Niagara Power: History of the Niagara Falls Power Company* (Niagara Falls: NY, 1927), 80.

³⁰ Adams, 81.

³¹ American Institute of Electrical Engineers, The Niagara Falls Electrical Handbook (St. Louis: MO, 1904), 41.

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Reduction Company (later ALCOA) entered into a twenty-six-year contract with the NFHP&M. Similar contracts with other industries followed and the NFHP&M began plans for constructing a much larger and more efficient power station.³²

2. Expansion of the Schoellkopf Power Station (1905-1924)

On May 23, 1905 a four-stage construction program commenced to build Power Station No. 3. The first stage consisted of building a forebay, a gatehouse, and penstocks on the high bank at the top of the gorge to supply and control the water to the station below. The second stage involved the construction of the fifteen-turbine-and-generator power station below the gatehouse in the gorge. In this station there were fifteen double-runner, 300-rpm, 10,000 hp turbines with horizontal shafts. Five of them drove pairs of 3,500-kW, 550-volt, DC generators which were owned by the Pittsburgh Reduction Company. The other ten were connected to 5,000-kW, 12,000-volt, three-phase, 25-cycle alternators. The five DC pairs were replaced by AC alternators in 1925. Stages three and four included building the Echota Substation in the Echota community of Niagara Falls and building a distribution system of high-voltage towers and wires.³³

By 1905, both the United States and Canadian governments had become alarmed at the rapid construction of hydro-electric power stations and the consequent diversion of water from the Niagara Falls cataract. In 1906, the US Congress enacted the Burton Law, which limited the amount of water American plants could divert from the Niagara River above the falls to 15,600 cubic feet/second. The Burton Law was superseded by the International Waterways Treaty, signed in 1909 between the United States and Canada, which made it unlawful to divert more than 20,000 cubic feet per second on the American side and 36,000 cubic feet per second on the Canadian side.³⁴

During the negotiations for these treaty restrictions, Secretary of War William H. Taft came to the Niagara Falls area to conduct hearings. He visited the Canadian side of the river and was distressed with the "Milling District" visible on the American bank north (downstream) of the falls with its concentration of unsightly factories and mills.³⁵ By 1906, there were four flouring mills (Schoellkopf and Matthews, Central Milling, Cataract City Milling, and Niagara Flouring), two paper plants (Pettibone-Cataract and Cliff), a silver plating

³² Michael B Powers, "The Schoellkopf Family," Master Thesis, University of Buffalo, 1980, 47.

³³ Echota was a company town designed by architect Stanford White and built between 1892 and 1893 for the workers of the Niagara Power Company who constructed the Edward Dean Adams Plant. Some houses still stand on Hyde Park Blvd. and along "A" through "G" Streets in Niagara Falls. Harper and Johnson 887

³⁴ Power Authority of the State of New York, "Niagara Power & Park Development," December 1954, 4.

³⁵ Harper and Johnson, 888

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firm (Oneida Community), a machine shop (Thomas E. McGarrgle), the Pittsburgh Reduction Company plant, the NFHP&M (Schoellkopf) Power Station, and the Niagara Falls Gas and Electric Company plant, all located in close proximity to each other and visible from both the Canadian side of the river and Niagara Falls itself.³⁶

Secretary Taft's concerns were expressed in an official document to Congress dated January 18, 1907:

The representative of the American Civic Association has properly described the effect upon the sightseer of the view toward the side of the canyon to be that of looking into the backyard of a house negligently kept. I shall appoint a committee...to advise me what changes at an expense not out of proportion to the extent of the investment can be made which will put the side of the canyon at this point from bottom to top in natural harmony with the falls and other surroundings, and will conceal as far as possible the raw commercial aspect that now offends the eye. This consideration has been kept in view in the construction of works on the Canadian side and in the buildings of the [Edward Dean Adams Station] above the falls. There is no reason why similar care should not be enforced here.³⁷

H.G. Wells had also commented upon the appearance of the high bank one year earlier: "Nothing-not even the hotel signs and advertisement boards-could be more offensive to the eye and mind than the Schoellkopf Company's untidy confusion of sheds and buildings on the American side, wastefully squirting out a long tail-race cascade."³⁸

The move to beautify the Niagara Falls area did not start with the Taft Commission but was part of a long history of popular agitation to preserve the natural beauty of the falls. Although manufacturing had existed in Niagara Falls at the beginning of power development in the 1840s, it was relatively small compared to what it was by the turn of the 20th century. As early as 1834, it was suggested that the land near Niagara Falls be cleared of factories, hotels, and signs in order that the falls might be viewed in a more natural setting. During the 1870s, many prominent citizens voiced their concern over conditions around the falls; these included landscape architect Frederick Law Olmsted; novelist Henry James; Charles Eliot Norton, the influential editor of *The Nation;* and Frederic Edwin Church, painter of the monumental *Niagara Falls.* A flood of articles and speeches poured forth, all of them intended to galvanize public support.

On July 15, 1885, the New York legislature voted to "authorize the selection, location, and appropriation of certain lands in the Village of Niagara Falls for a State reservation, and to preserve the scenery of the Falls of

³⁶ Hamilton B Mizer, Niagara Falls: A Selected Topical History (Niagara Falls, NY, 1991), 53,

³⁷ Ibid., 51.

³⁸ Daniel M Dumych, Images of America: Niagara Falls, Vol. II (Charleston, SC: 1996), 71.

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Niagara," thereby creating the Niagara Reservation.³⁹ The reservation, consisting of 412 acres, 300 acres of which were under water, was New York's first state park and established the state's interest in the guardianship of its natural scenic resources. As part of its creation, the state forced the removal of about 150 buildings and eradicated all raceways and flumes from the area. Station No. 3, however, the future Schoellkopf Power Station, remained outside the boundary of the new reservation. In a related move, the Cataract Power Company (later the Niagara Falls Power Company) commissioned architect Stanford White to build its power station (later known as the Edward Dean Adams Station) above the falls in an attempt to "beautify" a power company facility.⁴⁰

The NFHP&M responded to the Taft Commission by not renewing the leases of the offending mills, and modified the design of Power Station No. 3 by encasing the penstocks in reinforced concrete and then erecting the extant stone wall in front of them to conceal the penstocks leading from the forebay to the power station. This move "harmonize[d] with [the] office buildings and other buildings on the property," most of which were faced with uncoursed stone, thereby giving a more natural look in harmony with the gorge. ⁴¹ The wall, claimed to be the largest of its kind in the world at the time, was reported to have cost over \$100,000.⁴² Overseen by the chief engineer of the NFHP&M, John L. Harper, between 1908 and 1910, it is constructed of dolostone and limestone in two tiers and is 161 feet tall. A walkway between the two tiers was used as an observation deck and dining area.⁴³ When Taft re-visited in 1922 to speak at the American Bar Association as the chief justice of the Supreme Court, he complimented the power company upon the manner of construction of the power station, which "blends so well with the natural rock."⁴⁴

At the outbreak of World War I, the Niagara Falls power companies were granted permission by the War Department to increase their intake of water, but they also were requested to merge operations in an effort to increase output by pooling their resources. In 1918, the Hydraulic Power Company, the Niagara Falls Power Company (builder of the Adams Station), and the Cliff Electrical Distributing Company were merged under the name of Niagara Falls Power Company.⁴⁵ Several other mergers occurred in the ensuing years and by 1929, fifty-nine power companies in western New York State, including the company originally founded by Jacob

³⁹ Richard Greenwood, Niagara Reservation National Historic Landmark Nomination, 1976.

⁴⁰ James Gardner, Adams Power Plant Transformer House, National Register Nomination, 1978.

⁴¹ E.T. Williams, Niagara Falls and the Electrical Age (Niagara Falls, NY, 1910), 19.

⁴² Williams, 19.

⁴³ Harper Section of Station No. 3 (June 1911).

⁴⁴ William H. Taft File, Niagara Falls Public Library, Niagara Falls, NY.

⁴⁵ The Niagara Falls Hydraulic Power and Manufacturing Company was renamed the Hydraulic Power Company in 1910.

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Schoellkopf in 1878, had joined together to form the Niagara Hudson Power Corporation. Following internal reorganization in 1950, it became known as Niagara Mohawk Power Company.⁴⁶

The change in the water intake allowance by the War Department also prompted the 1918-1920 expansion of Station No. 3, by then known as Niagara Falls Hydraulic Power Station 3B, which included a new gatehouse, ice run, terminal building, powerhouse and the enlarging of the canal. While Station 3B was in its final stages of completion, the Niagara Falls Power Company planned another addition to Station No. 3, designated as Station 3C, which was completed in 1924. An important feature of the construction of Stations 3B and 3C is that the penstocks were excavated into the rock near the rock face of the gorge rather than exposing and then encasing them as was done at Power Station 3A.⁴⁷ In 1927, the entire complex was renamed the Schoellkopf Power Station.⁴⁸ At this time the Edward Dean Adams Station, built by the pre-merger Niagara Falls Power Company and located upstream of the falls, was taken off-line to be used only in cases of emergency, when the Schoellkopf Power Station could not provide power.

3. Creation of the Power Authority of the State of New York (1906-1931)

In 1906, in the wake of the success of hydro-electric development at Niagara Falls, New York Governor Charles Evans Hughes introduced the first public policy on public development of New York State's hydroelectric potential. Hughes was one of a number of influential politicians at the time who considered it improper to lease the water rights at Niagara Falls and elsewhere that belonged to the citizens of New York. The New York Legislature responded with the 1907 Fuller Act, which mandated that the state Water Supply Commission adopt plans for the development of hydro-electric power under public ownership and control.

Following World War I, public sentiment shifted toward government regulation and licensing of hydro-electric power. In 1920, Congress passed the Federal Power Act, which provided for the "development, transmission, and utilization of power, and the fostering of other beneficial public uses on waterways subject to Federal jurisdiction." The bill also directed the Federal Power Commission (FPC) to issue licenses to public or private power corporations "for terms limited to 50 years and upon conditions which protect the public interest in the water resources involved."⁴⁹ Under the Federal Power Act, the FPC was required to issue a power license to a

⁴⁶ Harper and Johnson, 890

⁴⁷ Fishman, 12.

⁴⁸ Powers, 53.

⁴⁹ United States Senate, Committee on Public Works, 83rd Congress, Second Session, "Niagara Power Project," August 5, 1954, 2.

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public corporation over a private one, given the choice between the two. As a result, New York and other states had to adopt their own legislation in order to retain any control over development on their navigable waterways.

In the 1920s Governor Alfred E. Smith promoted the idea of a statewide master plan for waterpower under the direction of a "New York State Power Authority." Franklin D. Roosevelt, first elected governor in 1928, spoke out forcefully for public power during his 1930 re-election campaign and promised that "electricity would become affordable; no longer would New Yorkers have to pay utility bills that were eight times higher than Canadians."⁵⁰ Roosevelt signed into law the bill authorizing the establishment of the Power Authority of the State of New York on April 27, 1931, making New York the first state to authorize a public power authority. Passage of the bill, which declared that development of hydro-electric power along those parts of the St. Lawrence and Niagara Rivers within the New York State boundaries shall be "in the interest of the people of this state," marked the end of a quarter century of debate on the state's public policies on hydroelectricity. It also marked the start of more than thirty years of mostly politically motivated delays before the authority produced its own power in the form of the Niagara Power Project at Niagara Falls.

4. Further Development of Hydro-Electric Power at Niagara Falls (1930-1956)

Development by the Canadians of the power potential of the Niagara River proceeded at a rapid pace during this period. The ten-turbine Sir Adam Beck plant, the largest on the Niagara River, was completed in 1930 and consisted of an intake structure at Chippewa and an 8.75-mile-long canal. Total installed capacity was 373,000 kw. By contrast, the Schoellkopf Plant had a capacity of 365,000 kw, with the much smaller Adams plant producing 80,000 kw. By 1949, there were four hydroelectric power stations along the Canadian side of the Niagara River: Sir Adam Beck Power Station in Queenston, and the Ontario, Toronto, and Rankine developments. The first three were operated by the Hydro-Electric Power Commission of Ontario (Ontario Hydro), and the Rankine plant was operated by the Canadian Niagara Power Company, owned by the Niagara Falls Power Company of New York.⁵¹ The four Canadian plants had a combined capacity of 848,000 kw, only a little less than twice as much as the two American plants at 445,000. It was generally conceded that the Canadian plants made more efficient use of the available river head and for much of the 1930s and 1940s, Canada was a net exporter of electricity to the United States.

⁵⁰ *PPNY*, 4-5.

⁵¹ Federal Power Commission, Bureau of Power, 1949, 19.

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The Canadians also were apparently more attuned to aesthetic considerations in the siting and design of their power facilities. On the Canadian side, the Ontario provincial government had set aside large areas along the Niagara River for parkland and recreational use since the early 1900s. Such attractions as the Paradise and Locust Grove Parks, the Floral Clock, and the Sir Harry Oakes Gardens contrasted with the view of the American side, characterized by motels, amusement parks, and the industrial landscape to the north of Niagara Falls.⁵² The two Sir Adam Beck hydroelectric plants built by Ontario Hydro in the 1930s and between 1950 and 1954 both incorporated extensive visitor and recreational facilities in their design.

During World War II, the United States and Canada signed several temporary emergency agreements diverting water from Niagara Falls for hydro-electric purposes. Clearly, the supply of low-cost power in both the northeastern United States and southeastern Canada had become insufficient to meet existing and potential requirements. Desiring a fuller and more efficient use of the water resources of the Niagara River than was permitted under the 1909 treaty, the two countries negotiated the "Treaty between Canada and the United States of America concerning the diversion of the Niagara River."⁵³

Signed in November, 1950 the new treaty changed the 1909 treaty's water allotment, in which Canada had been allowed to draw 36,000 cubic feet/second and the United States 20,000 cubic feet/sec. The new treaty provided that up to 100,000 cubic feet/second of water could be diverted for power purposes, the aggregate to be divided equally between the two nations, while still protecting and regulating the water flow over the falls. Should one nation not fully utilize its allocation of water resources, the other nation was allowed to make up this difference while still respecting the limits on total diversion.

No longer faced with the pre-existing limits on Niagara water diversion, Ontario Hydro announced in December 1950 the construction of a new hydro-electric power station designed to produce 700,000 hp at a cost of \$157 million. ⁵⁴ Work proceeded at a furious pace for the next few years, and the Sir Adam Beck II plant was officially opened on August 30, 1954. The rapidity of Canada's building efforts and its consequent advantage over New York in providing electrical power were a source of envy by the authority; its 1954 report noted that New York had to import on average 2 billion kilowatt hours of electricity from Canada that year.⁵⁵

⁵² Berton. 150.

⁵³ Power Authority of the State of New York, Annual Report for the Year Ended December 31, 1950. (Albany NY: n.p., 8).

⁵⁴ Like Ontario Hydro's earlier plant at Niagara Falls, this plant was named for former Ontario Hydro board chairman Sir Adam Beck. Pierre Burton, *Niagara: A History of the Falls* (Toronto, Ontario, 1992), 360.

⁵⁵ Power Authority of the State of New York, Annual Report for Year Ended December 31, 1954 (Albany, NY: n.p., 4).

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The legislation creating the authority had originally confined its jurisdiction to the St. Lawrence River, but in 1951, it was extended to the Niagara River by legislation passed upon the recommendation of Governor Thomas Dewey. Shortly after the announcement by Ontario Hydro of its plans to build a new power station, authority chairman John Burton declared that a similarly sized hydro-electric plant would be built at Lewiston, New York, located three miles downriver from Niagara Mohawk's Schoellkopf Plant. The Lewiston plant would include a system of open canals to divert water from above the falls and carry it to a holding reservoir located to the east of a retaining dam and power station. The new Lewiston Power Station would supplement the power produced at the Schoellkopf station and help meet the increased industrial and residential demand for power following the end of World War II. Although not stated, it was assumed that the aging Schoellkopf station would eventually be moved offline.

Construction of the Lewiston Power Station was delayed due to prolonged political disagreement over who would build it, the method for paying for it, and its effect on the fortunes of the existing New York power companies. Congress had attached a rider to the 1950 treaty reserving to itself approval of any project for the development of power on the Niagara River, seemingly usurping the power of both the FPC and the authority.⁵⁶ In 1951, competing bills were introduced in both the House and the Senate giving the right to build the Lewiston facility to the authority, to the US Army Corps of Engineers, or to private utilities.⁵⁷

Robert A. Moses, appointed in 1954 as chairman of the power authority by Governor Dewey, firmly believed that the Lewiston Plant should be built and operated by the power authority for the public good. Writing to a Congressional committee in 1954, Moses stated: "The record shows that the worst possible procedure from the viewpoint of public interest would be to turn over the waters of the Niagara to the five utility companies."⁵⁸ The charge against the public development of Niagara hydro-electric power by the authority was led by local Republican Congressman William E. Miller, aided by other powerful allies in Congress and the private utility interests in New York. They argued for continued private financing, development, and construction of the Niagara River's hydro-electric power facilities.

⁵⁶ "Niagara Bill Passage Ends Seven-Year Struggle," Niagara Falls Gazette, 15 August 1957.

⁵⁷ "The United States on its part expressly reserves the right to provide by Act of Congress for re-development, for the public use and benefit, of the United States' share of the waters of the Niagara River made available by the provisions of the Treaty, and no project for re-development of the United States' share of such waters shall be undertaken until it be specifically authorized by Act of Congress." United States Senate, Committee on Public Works, 83rd Congress, Second Session, "Niagara Power Project," August 5, 1954, 2.

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Robert Moses (1888-1981) possessed much of the personal determination and political power necessary to push forward with the authority's plans for hydro-electric plant development at both Niagara Falls and the authority's other proposed project, the St. Lawrence River project at Massena, New York. Often referred to as New York's "Master Builder," Moses was one of the most influential American urban planners of the twentieth century. During his long career, he derived much of his power and influence from his position as chairman of numerous New York state and city commissions and authorities, including the New York City Parks Commission, the State Council of Parks, the Triborough Bridge Authority and, between 1954 and 1962, the Power Authority of the State of New York. In these roles Moses was responsible for numerous public parks, bridges, and highways in and around New York City between 1920 and 1968. As chairman of the State Council of Parks (established 1924), Moses was also instrumental in implementing the New York's new comprehensive state park plan, which had been approved by the voters in 1924, and he was familiar with the numerous state parks established on the Niagara Frontier during the 1920s and 1930s: Whirlpool, Devils Hole, Lewiston Heights, Beaver Island and Buckhorn Island State Parks. Along with the St. Lawrence Power Project, built at nearly the same time, the Niagara Power Project represented the capstone of Moses's long public career and reflected his belief in the need for public ownership and design of power-generating facilities.⁵⁹

By 1955, the Canadian hydro-electric plants were supplying much of their electricity to the US at a greatly increased cost to both business and residential customers in western New York. In January 1956 the Senate approved a bill proposed by New York Senator Herbert Lehman to authorize the authority to finance and build the Lewiston Power Station. Its fate in the House of Representatives was uncertain, however, due to the opposition of Rep. Miller and Southern conservatives. There it languished for the first half of 1956.

5. Destruction of the Schoellkopf Power Station (June 7, 1956)

The following account is compiled from a walking tour by Barry Virgilio of the Niagara Falls Regional Office, New York State Office of Parks, Recreation, and Historic Preservation, and a series of firsthand accounts recorded by Niagara Mohawk and found at the NYPA Archives.

On June 7, 1956, Powerhouses 3B and 3C were destroyed by a series of rockslides. At 10:30 AM cracks were observed in the walls, glass was falling out of window panes, the floors were cracking, and water was beginning to come through the wall where the penstocks were located within the cliff. Sandbags were used, diverting the

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streams of water away from the generators, and ditches were dug. Just before 5 PM there were sixty-five men on the premises, with forty workers in the gorge throughout the three powerhouses. At 4:57 PM the wall above the ice run gave way, indicating that Powerhouses 3B and 3C were sliding into the gorge. At 5:02 PM penstock 21 let go; its water rushed through the powerhouse, knocking down the south and cliff wall of Powerhouse 3C.

As the two stations slid closer to the river, penstocks 18 through 20 ruptured, sending in even more water and shorting out the generators in Powerhouse 3A, causing massive explosions and fires. At 5:15 PM a 60-foot long section of the gorge wall collapsed, carrying some of Powerhouse 3C into the river. Two more rockslides occurred between 5:27 PM and 5:30 PM, progressing from south to north, which crushed Powerhouses 3B and 3C. Powerhouses 3B and 3C lay in a pile of rubble, and Powerhouse 3A was severely damaged and on fire. The gatehouses at 3A and 3C closed, but due to a design flaw, the gatehouse at 3B could not be closed and allowed water to flow over the gorge unabated for three days.

Of the forty men in the powerhouses at the time of the disaster, only one man, Richard Draper, of Lewiston, was killed. When several workers started screaming, nearly everyone dashed the length of the generator floor to the north end of Powerhouse 3A. They then climbed through a small door and scrambled along the shoreline toward the Niagara Falls Incinerator Plant, where they hiked up a service road to the top. Chris Nelson, a twenty-five-year-old plant operator, recalled "all of a sudden I saw a crack open up…and I made tracks, headed down the floor to the north. I thought maybe I could get the elevator up, but it was too late...there were rocks falling behind me, and I was running. The water was chasing me down the floor."⁶⁰ Richard Draper and two other workers, Louis Bernstein and Robert Chapman, were caught outside Powerhouse 3C at the south end, closer to the Rainbow Bridge. Bernstein and Chapman were picked up by a launch from the Canadian *Maid of the Mist*, but Draper, who had been wearing heavy boots at the time, was washed into the river.⁶¹ The noise of the rocks collapsing captured the attention of residents and tourists in the area and the collapse was captured on film. Later purchased by Niagara Mohawk, edited clips of film can be viewed at the Niagara Gorge Discovery Center, the Niagara Falls Public Library (Canada), and the NPP Power Vista.⁶²

Hundreds of tourists along the lip of the gorge and on the Rainbow Bridge watched in horror as the rock fall crashed into the rapids. Thousands more poured into the area afterward. Traffic jammed the two bridges linking the border with people watching the emergency operations. American residents were unable to cook

⁶⁰ "Collapse at Schoellkopf," Niagara Falls Gazette, 10 July 1956: 4.

⁶¹ Fishman, 11

⁶² Niagara Mohawk Video Recording,7 June 1956.

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dinner on electric stoves and headed to Ontario for meals. Many Canadians came to view the ruins across the river.⁶³ The *Niagara Falls Gazette* printed graphic descriptions of the Schoellkopf disaster in its special edition the following day:

The roar was awesome. It looked as if the whole gorge wall had opened up like the side of a skyscraper, down it came. Rocks and masonry burst into the air splitting into thousands of pieces and pelted the river like shrapnel. And a few fell on the Canadian side. A jet stream of water was unleashed. Three violent blasts followed. The river turned a sickly brown. White smoke poured upward from the gaping gorge mouth and the resounding echo died.⁶⁴

There were many eyewitnesses to the spectacular slide. Mr. C.A.R. Warren, a retired banker who lived near the gorge, said "the roaring noise sounded like a jet flying low" and sent him rushing to his living room window. "Everything seemed to be short circuited. Water was shooting high in the air and flames crackled through the building. I saw a wall start to break up. It crumbled a little bit at a time and then big sections came crashing down." Phillip Mullett of Brampton, Ontario was walking across the Rainbow Bridge when he noticed a big dust cloud. "Then there was a roar like a low flying jet plane" he said. Mullett stated the cloud seemed to spread up. When he saw a huge rush of water shooting out of the cliff from above the station, a section of cliff seemed to be ripped away and then the whole business crumbled and smashed into the building.⁶⁵ Glen Grassbrook, of Bender Hill, Canada, was one of the first witnesses on the scene. Grassbrook said "there was a hole in the roof at the cliff face and the building kept sliding into the river in parts. A blue and yellow fog was rising from the gorge from the generators and turbines. The crash sounded like a whine of a jet."⁶⁶ While the best accounts of the collapse were in the Niagara Falls newspapers in New York and Canada, it was reported in several national newspapers, such as the *New York Times, New York Herald-Tribune*, and *New York Post*.

Following the collapse of the Schoellkopf Power Station, an inspection was performed in 1956 by state geologists John G. Broughton and James R. Dunn of Albany, New York, along with Dr. Austin McTigue, and Louis S. Bernstein, an engineer of Niagara Mohawk Power.⁶⁷ The inspection revealed that the fallen rock was a mass approximately ten feet thick at the top and approximately sixty-five feet thick at the base, extending for the length of Powerhouses 3B and 3C, plus 200 feet, for a total of approximately 630 feet. Dr. McTigue, a nationally known seismologist and chairman of Canisius College Physics Department in Buffalo, concluded that the rockslide was caused by the presence of joints behind the rock face of the gorge and the build-up of

⁶³ "Mighty Splash: Giant Cloud, Great Roar as Rock Falls," Niagara Falls Review, 8 June 1965: 1,

⁶⁴ "Gorge Collapse Like the Fall of a Skyscraper," *Niagara Falls Gazette*, 8 June 1956.

^{65 &}quot;River Road Dwellers Take Vantage Points," Niagara Falls Review, 8 June 1965, 3.

⁶⁶ "Mighty Splash: Giant Cloud, Great Roar as Rock Falls," Niagara Falls Review, 8 June 1965, 1.

⁶⁷"Blame Erosion and Seepage for Collapse," Niagara Falls Gazette 11 July 1956, n.p.

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excessive pressures within the rock joints. According to Dr. McTigue, the widening of the joints could have been caused by 1) continual straining inherent to the rock mass; 2) blasting that was done during the construction of the penstocks and powerhouse; or 3) from seismic activity.⁶⁸

Niagara Mohawk workers said they thought water from the penstocks had swept under the gorge shale base and undermined it. Company officials speculated that the collapse was caused by seepage of water into the rock crevices between the face of the gorge and the hydraulic canal that fed water to the station. Walter Thompson, Public Relations Officer of Niagara Mohawk, suggested that there had been an earth movement but no official cause was ever declared.⁶⁹

To this day, the exact cause of the Schoellkopf Power Station collapse is not known. A site visit in 2000 by McMahon & Mann Structural Engineers came to the same conclusions as Dr. McTigue, speculating that the collapse was somehow related to seismic activity naturally occurring in the region. In addition, they pointed out that heavy trains in the early part of the 20th century regularly traveled on top of the gorge, causing tremendous vibrations of the rock below.⁷⁰ A third suggestion was that throughout the operation of the power station, there were frequent problems with the penstocks leaking and discharging water into the rocks. An attempt was made to seal things by pumping grout into the rock. This grouting program may have widened some joints or cracks in the rocks and blinded off drainage paths, resulting in major pressure build-up.⁷¹

6. Aftermath of the Schoellkopf Power Station Collapse (1956-1962)

The Schoellkopf Power Station collapse was a turning point in the history of the Niagara Falls and a devastating blow to the area's economy. After the collapse, 450,000 kilowatts of power were lost and two-thirds of the city west of 47th Street, including the majority of industrial facilities, was without power for eight hours. Local factories began receiving surplus power from other eastern cities and from Ontario the next day. A Niagara Mohawk official first estimated the damage to the Schoellkopf Power Station at \$100 million and promised it would be rebuilt immediately. Later, Niagara Mohawk revised the loss to about \$20 million.⁷² While the Schoellkopf Plant underwent emergency repairs, the Edward Dean Adams Station was brought back on-line to help supply power, although it could not produce the same amount of power. After thirteen of the generators in Station 3A were rebuilt for 60-Hz operation, the Schoellkopf station was brought back on-line in January 1957;

⁶⁸ Austin McTigue, Report on Rock Slide Niagara Mohawk Hydraulic Plant (Niagara Falls, NY, 1956).

⁶⁹ "Gorge Collapse Like the Fall Of A Skyscraper," Niagara Falls Gazette, June 8 1956.

⁷⁰ Fishman 15.

⁷¹ Ibid, 16.

⁷² Don Glynn, "The Collapse of Schoellkopf," Niagara Falls Gazette, 26 May 2006, 2.

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yet, it was estimated that more than 10 percent of the power generating facility of New York State was lost as a result of the Schoellkopf plant's demise.

The replacement power supplied by Ontario Hydro was considerably more expensive and, as low-cost electrical power was what originally brought factories to Niagara Falls and western New York, some industries made plans to leave.⁷³ Robert Moses, when asking New York State for a loan to start work at the new Lewiston plant, stated that "the collapse…terminated the supply of low cost power to basic industries in the Niagara region. These industries have confirmed our fears that some of them may not be able to remain in the Niagara area unless assurance is given that the new plant at Lewiston will be built immediately. In the event that any of these industries leave the area or materially reduce production, serious unemployment and other hardships will result."⁷⁴

The Schoellkopf Power Station disaster was a pivotal point in the long-stalled Congressional debate over the development of hydro-electric power at Niagara Falls and was a major impetus for moving the Lehman bill forward toward passage. Moses and the power authority wasted no time in capitalizing on the disaster to advance their claim that the time for public ownership of hydro-electric facilities at Niagara had arrived. Speaking to the Buffalo Chamber of Commerce in 1959, Moses declared that, "whatever plausible argument there may have been made for licensing private utilities by Congress to develop power on the New York side was lost when the Schoellkopf station at Niagara collapsed. The only sane answer was a new authority plant at Lewiston, started without delay."⁷⁵ Moses also applied pressure on Congress to head off Niagara Mohawk's stated plans to rebuild hydro-electric power facilities at the Schoellkopf site or elsewhere. Writing to the chairman of the House Public Works Committee, Moses wrote: "There can be no sense in rebuilding the old, inefficient plant at the old location, where the Niagara Mohawk Power Company has paid a nominal rental to the state." ⁷⁶

What differentiated the power authority's proposal from that of Niagara Mohawk and the other private utilities to rebuild hydro-electric power facilities at Niagara Falls was Robert Moses's intention to integrate the facility rebuilding efforts with a general upgrading and beautification of Niagara Falls, the Niagara Reservation, and

⁷³ Dumych, 77.

⁷⁴ "Loan Asked to Push Niagara Power Plan," New York Times, October 6 1956,44.

⁷⁵ Robert A. Moses, "Address by Robert A. Moses, Chairman, Power Authority of the State of New York and Chairman of the State Council of Parks," Luncheon of Buffalo Chamber of Commerce at Statler-Hilton Hotel, March 23, 1959.

⁷⁶ "Moses Proposes Action at Once on Power Issue," undated newspaper article, PASNY Archives vertical file.

Schoellkopf Power Station 3 Site Name of Property

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surrounding parkland. Moses deplored the fact that "more interest has been shown in the industrial aspects of the (Niagara) Frontier than in its scenic wonders, that private utility companies have exploited natural resources owned by all the people, and that the American side of the River suffers in comparison with the beautiful park developments of the Canadian side."⁷⁷ In responding to the Schoellkopf disaster, Niagara Mohawk focused narrowly on building a replacement power station to take advantage of the additional power allotments of the 1950 treaty. In contrast, even before the 1956 disaster, the power authority had developed an elaborate and complex set of plans for parkland and parkway development and an upgrade to visitor facilities at the falls, in addition to the massive power station, dam, and reservoir planned at Lewiston. The authority thus skillfully positioned itself as the protector of the scenic beauty of Niagara Falls, while promising to provide cheap electrical power to its residential and industrial customers.

The comprehensive transportation and parkland plans developed by Moses and the authority were detailed in the report of September 1956, "Niagara Power Park and Arterial Development."⁷⁸ Moses believed that the present industrial conditions of the American side of Niagara Falls were unsightly and its tourist attractions overly commercialized. Tourist traffic was bogged down in the congested streets of downtown Niagara Falls, while automobile traffic to and from Canada reached a bottleneck at the Rainbow Bridge.

His plan was to link Niagara Falls more strategically with the emerging US interstate system and draw more visitors to the falls, the Niagara Reservation, and other nearby state parks through a system of scenic parkways and highways. The plan for the Niagara region was only a part of New York's progressive state park plan, which called for an integrated system of parkways linking parks and major population centers across the state. Developed beginning in 1924, by the late 1950s, a well-developed system of parks and parkways stretched across Long island and up both sides of the Hudson River and parks had been developed through the state.

To this end, Moses proposed construction of the Niagara Parkway, a four-lane divided highway that would link the Grand Island Bridge to the east with Niagara Falls. The parkway was to be built along the river shoreline atop excavated fill produced during construction of the Niagara Power Project. North of Niagara Falls, the parkway would link the Niagara Reservation with previously disconnected Whirlpool and Devils Hole State Parks. The Niagara Expressway, an extension of the New York State Thruway from Buffalo to Canada, would join the Niagara Parkway in Lewiston, just south of a new bridge linking Lewiston and Queenston, Ontario.

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⁷⁷ Power Authority of the State of New York, *Niagara Power Park and Arterial Development*, 28 September 1956, 5. ⁷⁸ Ibid., 6.

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Related to these transportation improvements were planned authority-financed upgrades to Goat Island, Beaver Island State Park, Buckhorn Island State Park (to be turned into a bird sanctuary), and expansion of the Niagara Reservation.

Seeing little immediate action on the effort to move the Niagara Redevelopment Act through Congress, the power authority in August 1956 decided to apply unilaterally to the FPC for a license to build the Lewiston Power Station. In October 1956, the authority embarked on preliminary surveys, engineering studies, hydraulic model tests and other studies. This put the authority on a collision course with the private utilities who, despite the Schoellkopf disaster, still intended to rebuild and manage any new construction at Niagara.⁷⁹ Denied its license due to the Congressional rider attached to the 1950 treaty with Canada, the authority appealed the FPC decision in the courts. Ultimately successful in this attempt, the power authority's position was further strengthened when President Eisenhower signed the Niagara Redevelopment Act (Public Law 85-159) on August 21, 1957, authorizing the FPC to issue the license for construction of the Niagara Mohawk to give up its rights to divert water from the Niagara River in exchange for a promise by the authority to sell the utility 445,000 kW produced at the Lewiston plant annually to make up for power lost as a result of the Schoellkopf disaster.

A historic milestone was reached on October 3, 1961, when operations ceased at what was left of Niagara Mohawk's Schoellkopf Power Station, as the authority was already able to use the United States' entire share of the water not set aside by the 1950 treaty, and the station was thus rendered redundant.⁸¹ In line with the recreational and transportation improvements for the Niagara River shoreline envisioned by Moses, the authority had acquired the Schoellkopf Power Station site in 1957 and planned to use the property at the top of the gorge for the construction of the Niagara Parkway (now Robert Moses Parkway). The segment of the parkway planned between the Grand Island Bridge and the Lewiston-Queenston Bridge proceeded on schedule throughout 1961 and 1962. The bedrock removed during excavation for the Niagara Power Project was placed along the Niagara River shoreline to facilitate construction of the parkway.

 ⁷⁹ Power Authority of the State of New York, 26th Annual Report of the Power Authority of the State of New York (Albany, NY: n.p., 28 January 1957), 13.
 ⁸⁰ Power Authority of the State of New York, 27th Annual Report of the Power Authority of the State of New York (Albany, NY: n.p., 10 February).

⁶⁰ Power Authority of the State of New York, 2^{////} Annual Report of the Power Authority of the State of New Fork (Albany, N.T. I.p., 10 Fordary, 1958), 7.

⁸¹ Power Authority of the State of New York, 30th Annual Report (Albany, NY: n.p., 1962), 3.

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The authority's plans for the Schoellkopf Power Station site itself were articulated in its 1961 report: "The dramatic rebuilding of the Niagara Frontier now underway is a balanced improvement involving highways, parkways, parks, grade crossings removals, a new international bridge, and arterial highway extensions." Landscape design along the parkway, as well as the view of the shoreline from the Canadian side, were integral parts of the overall redesign and beautification of the Niagara Frontier as envisioned by Moses. As such, retention of any part of the Schoellkopf Power Station was seen as interfering with this plan. While the land atop the gorge would be reused for the parkway, Powerhouse 3 itself was simply an eyesore. In fact, the Schoellkopf station's presence into 1962 was the last impediment in the completion of the parkway, with the section between the Rainbow Bridge and the Robert Moses Power Station being the last segment completed and opened for traffic in late 1963.⁸² The remaining buildings at the top of the gorge were demolished by May 15, 1962; the old hydraulic tunnel was filled in with the building materials, and Powerhouse 3A (after the machinery was recycled to various industries in Buffalo and Canada) was demolished by November 15, 1962.83 A small observation deck was built atop the old elevator shaft and parking facilities and an overlook followed. While nothing within the gorge was consciously "redesigned," areas were graded and filled where possible. The old stone retaining wall, originally built to conceal some of the site's industrial features, now stood out as an object of beauty within the ruined plant.

7. Archeology

Based on the detailed record of the structures and machinery at the site of Powerhouses 3B and 3C, both before and after the disaster, as well as first-hand inspection of the site on May 11, 2010, by James D. Angelo Ph.D. and Nancy Herter (Historic Preservation Archaeology Analyst of the New York State Historic Preservation Office), it is clear that the site of the Schoellkopf Powerhouses 3B and 3C contains intact buried deposits, including hydroelectric turbines, generators, and other machinery *in situ*.⁸⁴ Various features associated with Powerhouses 3B and 3C, as well as Powerhouse 3A, are also preserved at the site. While these are all significant under criterion A for their association with the collapse of the site, without actual archaeological investigations to explore the nature of the remaining deposits and their potential to yield information important to an understanding of the site and broader aspects of the past, it is not possible to assess whether the site is significant under criterion D. Industrial sites like Schoellkopf may shed light on the history of technology,

⁸² The parkway has been excluded from the nomination because it is part of a much larger resource, the Niagara Region Parkway System, that has not yet been fully evaluated. BUT MAY BE NRE – check

⁸³ Joe Donaldson, "Schoellkopf Plant Fast Being Razed," Niagara Falls Gazette, 21 Feb 1962: 4.

⁸⁴ Niagara Mohawk Power Corporation, Schoellkopf Station After Rock Slide (June 1957) and Uhl, Hall & Rich, Incidental Niagara Power Facilities: Schoellkopf Interchange & Demolition (December 1961).

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revealing details about how technology was implemented in a given setting that may not be captured in the documentary record. Archaeological investigations may provide an opportunity to consider the relationship between the technology as well as other material culture at the Schoellkopf site and themes within a larger social historical context. The Schoellkopf site also presents an opportunity to explore questions germane to labor archaeology, particularly since the area of the collapse may have preserved material culture associated with Powerhouses 3B and 3C that could provide an unfiltered window on a moment in time. Archaeological site contexts formed from catastrophic destruction have the advantage of preserving a space and its material contents as they existed while in use-not after being tidied up for public view, salvaged of useable items after abandonment, or subject to any number of site formation processes that could obscure evidence of the original living context of artifacts and features. Some number of personal items are likely intermingled with the wreckage of turbines, generators, and other equipment in Powerhouses 3B and 3C and could help tell the story of the workers who labored at the Schoellkopf Power Station. Because the site owes its existence to the dramatic events of June 7, 1956, it offers the potential for disaster archaeology, where the material remains could contribute to the human story of the collapse. Not only did the collapse likely preserve in place quotidian evidence of the workers' daily lives, it may have sealed below the rubble evidence of actions taken through the day in response to the signs of the looming catastrophe, as well as the chaotic evacuation of workers immediately preceding the collapse. Archaeological remains associated with the Schoellkopf site may also shed light on questions pertaining to the siting of Schoellkopf within its specific environmental setting and how its setting influenced the site. Depending on the nature of the remains preserved at the site, any of these research questions or others could be addressed. Without actual archaeological work to assess the integrity and richness of deposits at Schoellkopf, it is not possible to address the potential significance of the site under National Register Criterion D.

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Niagara, NY County and State

<u>Historic Drawings and Specifications (Located at the NYSOPRHP Niagara Region Administrative</u> Offices at DeVeaux State Park)

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June 1957	Schoellkopf Static	on After Rock Slide.
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1894 Karl Baedeker's Map of Niagara Falls, New York/Ontario

1897 Sanborn Fire Insurance Company's Map of Niagara Falls

1903 Walter Jones' Tourist Map of Niagara Falls

1904 Map of Niagara Falls Showing Electrical Development

1908 Century Map Company's Atlas of Niagara County

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<u>Historic Photographs (Located at the NYSOPRHP Niagara Region Administrative Offices at DeVeaux</u> <u>State Park)</u>

Circa 1900 View of Stations No.1 and No. 2

Circa 1910 View of the Stations No. 1, No. 2, and No. 3

June 8, 1910 View of Construction of Powerhouse 3A including Stone Wall, Penstocks, and Elevator Shaft

Circa 1920 View of Site After Completion of Powerhouse 3B and Ice Run

June 8, 1956 View of Site After the Collapse on June 7, 1956

June 8, 1956 Close-Up View of Elevator Shaft and Ice Run After the Collapse on June 7, 1956 March 20, 1959 Historic View of Site After 1956-57 Rehabilitation during Cleanup of Powerhouses 3B and 3C

November 29, 1961 View of Site Prior to 1962 Demolition of Powerhouse 3A and High Bank Facilities June 15, 1963 Historic View of Site After 1962 Demolition while Robert Moses Parkway is under

Construction

March 8, 1976 Historic View of Site after construction of Schoellkopf Geological Museum

N			Interior Register of Historic Places Registratio OMB No. 1024-				(Expires 5/	31/2012)	
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Verbal Boundary Description (Describe the boundaries of the property.)

The boundary is indicated on the enclosed map with scale.

Boundary Justification (Explain why the boundaries were selected.)

The nomination boundary was drawn to encompass the site of the Schoellkopf Power Station after its collapse in 1956 and subsequent demolition and cleanup between 1956 and 1962. The nomination boundary was drawn based upon the location and distribution of the extant physical remains of the Schoellkopf Power Station, supplemented by historic maps and engineering plans. The nomination boundary excludes areas on top of the gorge that were originally part of the power plant site because they have been redeveloped and no longer retain enough integrity to illustrate the events of 1956. The nomination also excludes the Robert Moses Parkway because, although it was a part of the 1962 redevelopment, it is also part of a much larger resource that has not yet been evaluated. Although the entire Schoellkopf Power Station site lies within the Niagara Reservation National Historic Landmark, the nomination for the power plant site recognizes a completely different area and period of significance.

United States Department of the Interior	
National Park Service / National Register	of Historic Places Registration Form
NPS Form 10-900	OMB No. 1024-0018

(Expires 5/31/2012)

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11. Form Prepared By

name/title	Ellen Jenkins, Preservation Planner; Larissa Thomas, Ph. D., Archaeologist								
	contact: Kathleen LaFrank, New York SHPO, 518.237.8643 x 3261								
organization	TRC Environmental Corp.	_date	Sep	tember 2012					
street & number 4155 Shackleford Road, Suite 225telephone 770-270-1192									
city or town	Norcross	state	GA	zip code	30093				
e-mail	ejenkins@trcsolutions.com			1					

Additional Documentation

Submit the following items with the completed form:

Maps: A USGS map (7.5 or 15 minute series) indicating the property's location.

A Sketch map for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.

- Continuation Sheets
- Additional items: (Check with the SHPO or FPO for any additional items.)

Photographs:

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map.

Name of Property: Schoellkopf Power Station City or Vicinity: Niagara Falls County: Niagara State: NY Location of Original Digital Files: New York Power Authority, Agency Preservation Officer, 123 Main Street, Mailstop 5-E, White Plains, NY 10601-3170

(Note Historic photographs and aerial images are not shown on the photo location map)

Description of Photograph(s) and number:

Photographer: Ellen Jenkins (TRC) Date Photographed: May 2010 1 of <u>24:</u> General View of Site, Looking East

Photographer: Ellen Jenkins (TRC) Date Photographed: May 2010 2 of <u>24</u>: Close-up View of Site (Tailrace of Powerhouse 3A (left) and Area of Collapse with Ice Run (Right of Elevator Shaft)), Looking East.

Photographer: Ellen Jenkins (TRC) Date Photographed: May 2010

(Expires 5/31/2012)

Schoellkopf Power Station 3 Site Name of Property Niagara, NY County and State

3 of <u>24</u>: View of Stone Wall. Tier 1: Gatehouse 3A (Above) and Tier 2: Stone Wall Concealing Penstocks (Below) with Niagara Gorge Discovery Center in Background, Looking North.

Photographer: Ellen Jenkins (TRC) Date Photographed: May 2010 4 of <u>24:</u> View of Stone Wall. Tier 1: Gatehouse 3A (Above) and Tier 2: Stone Wall Concealing Penstocks (Below) with Niagara Gorge Discovery Center in Background and Powerhouse 3A Tailraces along Shoreline, Looking East.

Photographer: Ellen Jenkins (TRC)
Date Photographed: May 2010
5 of <u>24</u>: View of the Station 3A Penstock #2 with Concrete-Block Fill, Looking Southeast.

Photographer: Ellen Jenkins (TRC)Date Photographed: May 20106 of <u>24</u>: View of Elevator Shaft (Left) and Ice Run (Right), Looking South.

Photographer: Ellen Jenkins (TRC)
Date Photographed: May 2010
7 of <u>24:</u> View of Elevator Shaft (Left) and Ice Run (Right) with Debris of Station 3B and Terminal Building (Below), Looking East.

Photographer: Ellen Jenkins (TRC) Date Photographed: May 2010 8 of <u>24:</u> Close-Up View of Elevator Shaft (Left) and Ice Run (Right), Looking East.

Photographer: Ellen Jenkins (TRC)Date Photographed: May 20109 of 24: View of Powerhouse 3A Tailraces, Looking South.

Photographer: Ellen Jenkins (TRC) Date Photographed: May 2010 10 of <u>24:</u> View of a Powerhouse 3A Tailrace, Looking East.

Photographer: Ellen Jenkins (TRC) Date Photographed: May 2010 11 of <u>24:</u> View of the Interior of a Powerhouse 3A Tailrace, Looking East.

Photographer: Ellen Jenkins (TRC) Date Photographed: May 2010 12 of <u>24</u>: Close-Up View of a Concrete Support Encased with Steel at a Powerhouse 3A Tailrace, Looking Northeast.

Photographer: Ellen Jenkins (TRC) Date Photographed: May 2010 13 of <u>24:</u> View of the Ice Run, Looking East.

(Expires 5/31/2012)

Schoellkopf Power Station 3 Site Name of Property Niagara, NY County and State

Photographer: Ellen Jenkins (TRC) Date Photographed: May 2010 14 of <u>24:</u> View of *in situ* Turbine #17 from Powerhouse 3B, looking South.

Photographer: Ellen Jenkins (TRC) Date Photographed: May 2010 15 of <u>24:</u> Powerhouse 3B Tailrace.

Photographer: Ellen Jenkins (TRC) Date Photographed: May 2010 16 of <u>24:</u> Powerhouse 3C Tailrace.

Photographer: Unknown, Copyrighted by Daniel Dumych (Arcadia: 1996)
Date Photographed: June 8, 1910
17 of <u>24</u>: Historic View of Construction of Station 3A (Left) including Powerhouse 3A (Along the River Bank) and Stone Wall, Penstocks, and Elevator Shaft (Only Steel Framing is Visible) Rising Above it. ALCOA is Located Just North of the Station and is Identified by the Four Square Towers.

Photographer: Unknown, Copyrighted by Daniel Dumych (Arcadia: 1996)
Date Photographed: Circa 1920
18 of <u>24</u>: Historic View of Site After Completion of Station 3B Including the Ice Run (Right of the Elevator Shaft) and Terminal Building (On the High Bank).

Photographer: Unknown, Photograph part of Lloyd Drapier Collection (NYPA Archives)
Date Photographed: June 8, 1956
19 of <u>24:</u> Historic View of Site After the Collapse on June 7, 1956. Powerhouse 3A (Left) is Still Generating
Power as Evidenced by the Water Discharging from the Tailraces.

Photographer: Unknown, Photograph part of Lloyd Drapier Collection (NYPA Archives) Date Photographed: June 8, 1956 20 of 24: Historic Close-Up View of Elevator Shaft, Crane, and Ice Run After the Collapse on June 7, 1956.

Photographer: Power Authority of the State of New York

Date Photographed: March 20, 1959

21 of <u>24:</u> Historic View of Site After 1956-57 Rehabilitation of Powerhouse 3A (Left) and During Cleanup of Powerhouses 3B and 3C (Right). The Spillway has been Constructed on the High Bank.

Photographer: Power Authority of the State of New York Date Photographed: November 29, 1961

22 of <u>24</u>: Historic View of Site Prior to 1962 Demolition of Station 3A (Left). The Site of Powerhouses 3B and 3C has been Graded Where Possible and Fill Placed into the Niagara River (Right).

Photographer: Power Authority of the State of New York Date Photographed: June 15, 1963

23 of <u>24:</u> Historic View of Site After 1962 Demolition with Robert Moses Parkway under Construction. The Rainbow Bridge is in the Foreground with the Parkway Running North to the Interchange. The Stone Wall and Powerhouse 3A Tailraces are Visible in the Background.

(Expires 5/31/2012)

Schoellkopf Power Station 3 Site Name of Property Niagara, NY County and State

Photographer: Power Authority of the State of New York Date Photographed: March 8, 1976

24 of <u>24</u>: Historic View of Site after Construction of the Niagara Gorge Discovery Center. The Stone Wall, Elevator Shaft, and Powerhouse 3A Tailraces are in the Foreground with the Discovery Center and Parking Lot on the High Bank.

Property Owner:	
(Complete this item at the request of the SHPO or FPO.)	
Name New York Power Authority	
street & number 123 Main Street	telephone 914-681-6200
city or town White Plains	state NY zip code 10601-3170

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.

Schoellkopf Power Station No. 3 Site

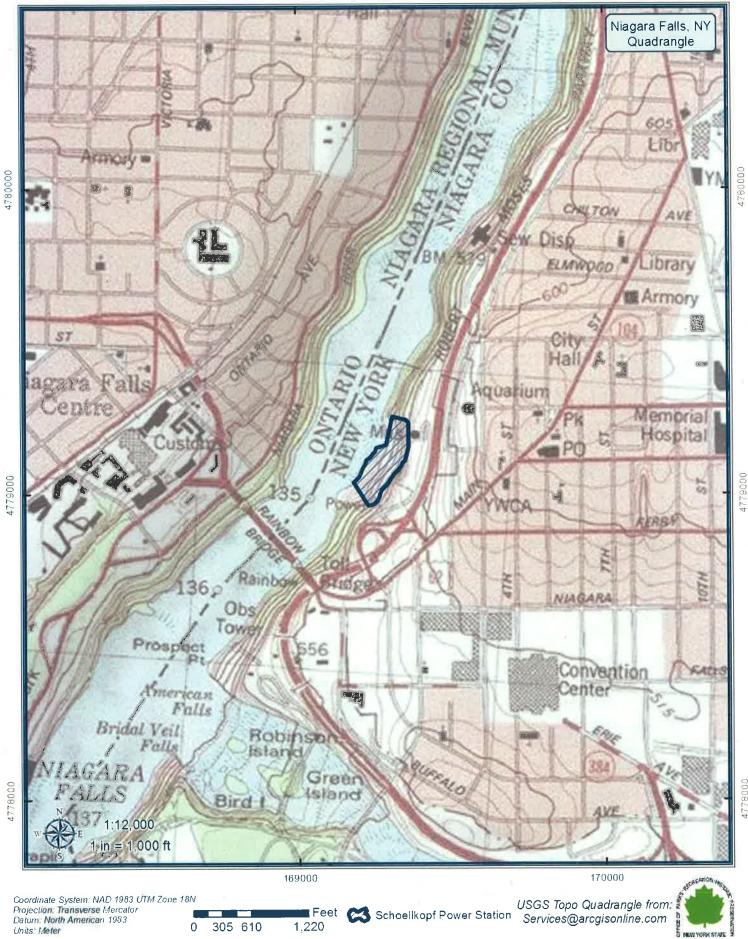
City of Niagara Falls Niagara County, New York



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Schoellkopf Power Station No. 3 Site

City of Niagara Falls Niagara County, New York



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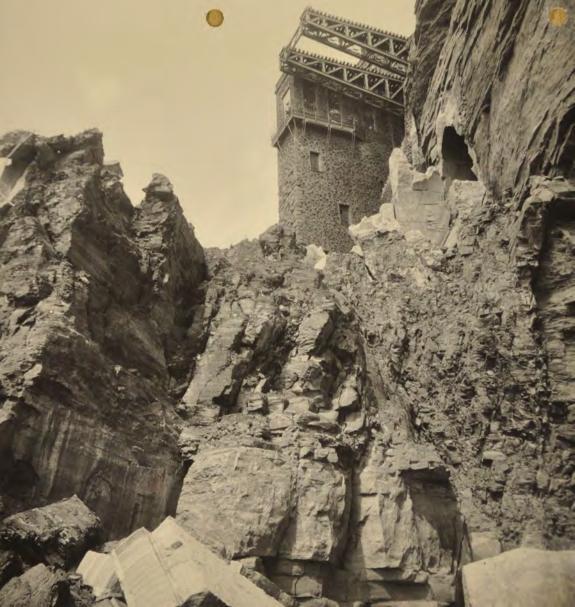




















UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Schoellkopf Power Station No. 3 Site NAME:

MULTIPLE NAME:

STATE & COUNTY: NEW YORK, Niagara

DATE RECEIVED: 1/04/13 DATE OF PENDING LIST: DATE OF 16TH DAY: DATE OF 45TH DAY: 2/20/13 DATE OF WEEKLY LIST:

REFERENCE NUMBER: 13000029

REASONS FOR REVIEW:

APPEAL:	Ν	DATA PROBLEM:	Ν	LANDSCAPE:	Ν	LESS THAN 50 YEARS:	Ν
OTHER:	Ν	PDIL:	Ν	PERIOD:	Ν	PROGRAM UNAPPROVED:	Ν
REQUEST:	Y	SAMPLE:	Ν	SLR DRAFT:	Ν	NATIONAL:	Ν

COMMENT WAIVER: N

_DATE REJECT ACCEPT RETURN

ABSTRACT/SUMMARY COMMENTS:

RECOM./CRITERIA	
REVIEWER WORKS	DISCIPLINE
TELEPHONE	DATE

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.

The Scheollkopf Power Plant Station 3 site is eligible under Criterion D for historical archeology (Archeology-Historic-Non-aboriginal) for the potential of the property to yield significant information about the implementation of technology at the site, the lives and labor of the workers, environmental aspects of the site and its setting, and the human, industrial, and technological aspects of the site's collapse. It is very clear from watching the video of the collapse, examining the property today, and from knowing what industrial and labor archeologists generally excavate at sites, materials they recover, and research designs developed specifically for these types of sites, that there are substantial and significant archeological materials remaining at this property needed to address this type of important research.

Erika Martin Seibert, Ph d. Archaeologist 202-354-2217 2/26/2013



City of Niagara Falls, New York

P.O. Box 69, Niagara Falls, NY 14302-0069

City Hall 745 Main Street

Paul A. Dyster Mayor

Website: <u>www.niagarafallsusa.org</u> e-mail: paul.dyster@niagarafallsny.gov

DEC 14 2012

Phone: (716) 286-4310 Fax: (716) 286-4349

December 12, 2012

Ruth L. Pierpont Deputy Commissioner for Historic Preservation Historic Preservation Field Services Bureau – Peebles Island PO Box 189 Waterford, New York 12188-0189

Re: Schoellkopf Power Station No. 3 Site

Dear Ms. Pierpont,

Thank you for your letter dated October 12, 2012 notifying the City of Niagara Falls of the proposed nomination of the above referenced property to the State and National Registers of Historic Places. This Office has forwarded your notice and the accompanying materials to the Niagara Falls Historic Preservation Commission, which will offer its own review and comment on the proposed application for listing. My Office concurs with the proposed application and listing of the Schoellkopf site to the State and National Register. The Schoellkopf Power Station site, its associated ruins and remaining structures, constitute a significant set of resources for interpreting hydroelectric production at the site and more importantly that chapter of the city's history.

The Mayor's Office looks forward to working with you in the future on this and asks that we be kept involved as the process moves forward. Should you have any questions, please feel free to contact me at 286-4310.

Sincerely,

Paul A. Dyster Mayor

CC: T. DeSantis, AICP, Senior Planner Niagara Falls Historic Preservation Commission



City of Niagara Falls, New York

P.O. Box 69, Niagara Falls, NY 14302-0069

December 7, 2012

Ruth L. Pierpont Deputy Commissioner for Historic Preservation Historic Preservation Field Services Bureau - Peebles Island PO Box 189 Waterford, New York 12188-0189

Rei Schoellkopf Power Station No. 3 Site

Dear Ms. Pierpont,

The City of Niagara Falls Historic Preservation Commission has reviewed the Schoellkopf Power Station No. 3 Site application for the State and National Registers of Historic Places. The Schoellkopf site is a significant historic site because it is where the production of electricity as a commodity began in 1881; the development of cheap and abundant electricity fueled New York State's growth as an industrial titan. In the ruins of power plant, there are significant contributing components of the original structure which give a clear understanding of hydroelectric production at the site. Consequently, the City of Niagara Falls Historic Preservation Commission applauds efforts to advance the Schoellkopf site to the State and National Register.

We look forward to working with you in the future. Should you have any questions, please feel free to contact me at 284-2387.

Sincerely,

andrea Galyn

Andrea Galyn Chair Historic Preservation Commission

xc: Mayor Paul Dyster HPC Members

Ruth Pierpont - December 7, 2012



NIAGARA FALLS NATIONAL HERITAGE AREA

119 TIMON HALL/P.O. BOX 1932 NIAGARA UNIVERSITY, NY 14109 (716) 286-8579

December 17, 2012

Ruth L. Pierpont Deputy Commissioner for Historic Preservation Historic Preservation Field Services Bureau-Peebles Island P.O. Box 89 Waterford, NY 12188-0189

Dear Ms. Pierpont:

I am writing on behalf of the Niagara Falls National Heritage Area Commission in support of the Schoellkopf Power Station No. 3 Site application for the State and National Register of Historic Places. The Schoellkopf site is an important historic site related to the early production of electricity and the rise of western New York State as a key industrial area. The site includes ruins of the early plant that may provide further understanding of early hydroelectric production. We feel that the Schoellkopf site is worthy of listing on the State and National Register of Historic Places.

The Niagara Falls National Heritage Area heartily endorses this application. If you have any questions, please contact me at <u>chambers@niagara.edu</u> or 716/286-8091.

Sincerely,

Thomas A. Chambers Chairman





IN PARTNERSHIP WITH THE National Park Service U.S. Department of the Interior



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drew M. Cuomo Governor

Rose Harvey Commissioner

New York State Office of Parks, **Recreation and Historic Preservation**

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189 (CE 518-237-8643

www.nysparks.com

27 December 2012

Alexis Abernathy National Park Service National Register of Historic Places 1201 Eye St. NW, 8th Floor Washington, D.C. 20005

Re: National Register Nominations

Dear Ms. Abernathy:

I am pleased to enclose the following four National Register nominations to be considered for listing by the Keeper of the National Register:

Schoellkopf Power Station No. 3 Site, Niagara County The Bowery Historic District, New York County First Battery Armory, New York County Storehouse #2, U.S. Navy Fleet Supply Base, Kings County

Thank you for your assistance in processing these proposals. Please feel free to call me at 518.237.8643 x 3261 if you have any questions.

Sincerely:

Kathleen LaFrank National Register Coordinator New York State Historic Preservation Office