NPS Form 10-900
(Rev. 8-86)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

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NATIONAL REGISTER

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Bodwell Water Power Company Plant
other names/site number Bodwell Power Plant; Bangor Hydro-Electric Milford Plant; Milford Hydro Plant

2. Location

street & number E side Penobscot River, at Bridge Street [N/A] not for publication
city, town Milford [N/A] vicinity
state Maine code ME county Penobscot code 019 zip code 04461

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
		Contributing	Noncontributing
[XX] private	[ ] building(s)	1	____ buildings
[ ] public-local	[XX] district	____	____ sites
[ ] public-State	[ ] site	1	____ structures
[ ] public-Federal	[ ] structure	____	____ objects
	[ ] object	2	0 Total

Name of related multiple property listing: N/A

Number of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this [X] nomination [ ] request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property [X] meets [ ] does not meet the National Register criteria. [ ] See continuation sheet.

Signature of certifying official, S.H.P.O. — Date 8/26/88

Maine Historic Preservation Commission
State or Federal agency and bureau

In my opinion, the property [ ] meets [ ] does not meet the National Register criteria. [ ] See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

[X] entered in the National Register. [ ] See continuation sheet.
[ ] determined eligible for the National Register. [ ] See continuation sheet.
[ ] determined not eligible for the National Register.
[ ] removed from the National Register.
[ ] other, (explain:) ____

Entered in the National Register 9/29/88

Signature of the Keeper — Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)	Current Functions (enter categories from instructions)
INDUSTRY/PROCESSING/EXTRACTION	INDUSTRY/PROCESSING/EXTRACTION
Energy Facility	Energy Facility

7. Description

Architectural Classification (enter categories from instructions)

Romanesque

Materials (enter categories from instructions)

foundation Concrete
walls Brick
roof Asphalt shingle; roll roofing
other Metal window sash

Describe present and historic physical appearance.

The Bodwell Water Power Company Plant is the dominant feature of the broad flat river landscape at Old Town Falls, Old Town and Milford, Maine, where the view from the bridge over the Penobscot River also includes the historic St. Anne's Church and Mission site (N.R. 11/26/73) on Indian Island in mid-stream, somewhat upriver of the plant. A beautifully composed basilican structure of fine materials, it replaces the numerous earlier mills which operated in Old Town and Milford on these falls, the most abundant source of water power on the Penobscot River. With the exception of the Old Town Woolen Mill, across the river and upstream from the plant, it is the only surviving brick mill. (The woolen mill, though rehabilitated as a senior citizen housing complex, has lost its original details including all windows and doors and is best viewed from a distance.)

The Bodwell Plant is a massive steel-frame brick structure (226 feet long by 85 feet) which projects into the Penobscot River from the Milford shore. It was built at the same time as the adjacent 1,400-foot dam (the latter completed in 1907), which is slightly below the site of the earlier, longer (about 1,700 feet) dam at these falls. Because of this situation and its imposing two-story concrete sub-structure, of which the northern flank comprises the forebay of the hydro installation (the wheel pits were located here) and the southern, the more visible site, the tail race, is perceived as part of the adjacent dam. (A 25-foot log sluice actually adjoins the southwesterly flank and breaks the connection to the dam.)

The elevations of the building have been composed with almost Roman (rather than Romanesque) subtlety. The two-story concrete foundation has a series of round arches articulated by buttresses at its base; above it are square basement windows containing tilting steel sash which carefully relate to the arcade (the building's foundation has an asymmetrical termination as it joins the sloping shore). The main engine house rests on this concrete base and resembles a basilical church in its division into "nave" (the generator room) and two side "aisles" (on the forebay, upriver side, were transformer rooms over the sluice gate, and a switch-board area). A gable roofed lantern or clerestory covers the nave, while the side bays or aisles have flat roofs. Fourteen round-head double windows with fanlights light the aisles and in the sides of the lantern are 42 six-light windows; all window elements are of steel. On the side elevations, the proportions, change in elements, and delicate detailing of the three levels from tail-race arcade to the main engine room displays a classicism recalling the superimposed Orders of the Colisseum or Renaissance buildings such as the Palazzo Medici-Riccardi. The lantern with window frames that correspond in their profile to the

☐ See continuation sheet

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

☐ nationally ☐ statewide ☒ locally

Applicable National Register Criteria ☒ A ☐ B ☒ C ☐ D

Criteria Considerations (Exceptions) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

Areas of Significance (enter categories from instructions)	Period of Significance	Significant Dates
Architecture	1906	1906
Engineering	1906	1906
Industry	1906-1938	

Cultural Affiliation

N/A

Significant Person

N/A

Architect/Builder

Johnson, Wallace Clyde, C.E., M.E.

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

From the standpoint of architectural distinction, the Bodwell Water Power Company Plant is an original and effective composition which displays real understanding of, and the ability to work from, historic precedent, and was at the same time designed by a civil and mechanical engineer for power generation. The plant was the last in a sequence of different mills in Old Town and Milford and the first of a new kind of mill, which made commercial and industrial history. This mill was intended only to provide power to run numerous factories, some as far away as South Brewer. Thus, the heir to the earlier mills on the Old Town Falls was not a "manufactory" of goods but the source of power to factories elsewhere and the herald of the modern power industry. The ambitious vision of the Bodwell Company's officers is reflected in the building's carefully orchestrated and elaborate details. The power plant meets National Register criteria A and C.

The company officials who were instrumental in the realization of this project had deep roots in the industrial and social history of the Bangor-Old Town region, and all apparently had been inspired by Maine Governor Joseph R. Bodwell (1818-1887), who directed the acquisition of the Milford site by the Bodwell Water Power Company in the early 1880s but died before the company's sawmill and lumbering operations were supplanted by the new kind of industry he foresaw. It was also typical of its era in its architectural richness--this was the era in which public and utilities' buildings were built as the equivalent of palaces in earlier eras, but its location in this relatively remote spot in the Penobscot River basin makes it uniquely surprising. It is even possible that the sophisticated architectural focus of the project interfered with the planning of its hydro components because studies beginning in 1913 show that the plant and dam arrangement were relatively inefficient as built. The project was planned to give the plant a head of 20 feet, but when it was built, it was discovered "that at no time could any such head be supplied" (Richardson and Wetherbee, see (9) below). The machinery and turbines had been designed for a 24-foot head, and the average head of water was 16 feet or less in summer, so the output could not be estimated accurately (Merry, see (9) below).

☒ See continuation sheet

9. Major Bibliographical References

Bangor, Maine. Bangor Hydro-Electric Company, collection of plans.

Committee on the History and Heritage of American Civil Engineers, A Biographical Dictionary of American Civil Engineers (New York: American Society of Civil Engineers, 1972).

Ford, H. A., ed. History of Penobscot County, Maine (Cleveland, 1882), p. 908 (regarding acquisition of Milford mills by Bodwell).

Industrial Journal: December 23, 1887, 2 (Governor Bodwell obituary); September 7, 1888, 1 (Old Town Woolen Mill); December 14, 1888 (damage in Bodwell mill); January 16, 1891, 1; May, 1905, 12; June, 1905, 7; August, 1905, 17; May, 1906, 6; September, 1906, 11-14; December, 1906, 16.

[X] See continuation sheet

Previous documentation on file (NPS):

- [ ] preliminary determination of individual listing (36 CFR 67) has been requested
- [ ] previously listed in the National Register
- [ ] previously determined eligible by the National Register
- [ ] designated a National Historic Landmark
- [ ] recorded by Historic American Buildings Survey # _____
- [ ] recorded by Historic American Engineering Record # _____

Primary location of additional data:

- [ ] State historic preservation office
- [ ] Other State agency
- [ ] Federal agency
- [X] Local government
- [X] University
- [ ] Other

Specify repository: Bangor, Bangor Hydro-Electric Co., collection of plans

10. Geographical Data

Acreage of property 10.8

UTM References

	Zone	Easting	Northing
A	19	527975	4971500
B	19	528100	4971625
C	19	527575	4971025
D	19	527450	4972225

[ ] See continuation sheet

Verbal Boundary Description

The nominated property of 10.8 acres occupies the Town of Milford tax map 23 lot 12

[ ] See continuation sheet

Boundary Justification

The boundary embraces the entire lot and low concrete dam historically associated with the power plant.

[ ] See continuation sheet

11. Form Prepared By

name/title Deborah Thompson, Ph.D., Architectural Consultant
organization N/A date 18 March 1988
street & number 112 Norfolk St. telephone 207 947-8016
city or town Bangor state Maine zip code 04401

buttresses of the Bodwell Power Plant is less easily observed and is partly obscured from view by the structure of the trash rack platform (installed 1983) and equipment./1 The roof of the central bay, once probably slate, is now of asphalt shingle, while the flat roofs of the side bays have always been covered with current forms of roll roofing.

The land and river facades of the building follow the same basic plan, but that of the land elevation has been altered somewhat (see below). Each has a tripartite entry motif; a somewhat taller central round-arch door with flanking windows (one a door) in the first-story "aisle" ends equal in height to the central door. The door in the former repair room (the first three bays in the southerly aisle) was replaced by a mid-20th century garage door. On both river and land facades, the central large double doors of heavy wood each paneled with three St. Andrew's crosses remain. Belts of molded brick articulate the facade at the level of the window and door transoms and the window archivolts are also of molded brick.

The windows have granite sills and granite is used to cope the facade and rear pediments, which extend outwards at either end and create a somewhat baroque facade evocative of Italian churches. A granite date placque on which is carved "1906" is placed below the window in the clerestory end, which has a pilastered frame to give it more importance in this location. Clerestory and aisles have denticulated brick cornices.

Connected to the Bodwell Plant projecting to the northeast, and concealing the former right-hand bay of the land facade, is a modern flat-roofed brick diesel plant built in 1959-60. It was designed (probably by Bangor Hydro engineers) in deference to the original building; it is of brick of a similar color and has shallow corbelled cornices and mid-20th century steel sash windows.

Structurally, the interior of the Bodwell Plant has hardly been changed since its construction. The roof is carried on steel trusses with a "25 ton Niles crane" resting on the entablature at the landward end when it is not in use. (It is a traveling crane and can be used at any point in the length of the central bay.) The central bay or "nave" is defined by colossal plain pilasters which rise to the base of the lantern. These are of the same two special types of brick, glazed white in the first story and pressed speckled buff-color in the second, as the walls; such brick is absolutely typical of commercial and public buildings of the early 20th century. Union Station, Bangor, built in 1906, had the same two kinds of brick on its interior walls, which is known to have been made in South River, New Jersey. On the downriver side of the central bay the pilasters enframe segmental or Tudor arches and a second story with offices and control panels is contained within the aisle bay. Still intact are the tile mosaic floor, original steel stair, walkway, and the ornamental railing in front of the arcade at this mezzanine over the former repair shop. Particularly notable are the bronze wall light fixtures attached at the second story level in alternate bays of the

nave walls except where the segmental arcade intervenes.

The original plans of the Bodwell Power Plant by Wallace Clyde Johnson, C. E., M. E., of Niagara, New York, survive and it is interesting to see that the design of the flank elevations was improved from the original drawing when the building was constructed; the original drawing has a busy treatment above the tail-race arcade with an alternation of paired superimposed horizontal "basement" windows and single "basement" windows, instead of square windows which exactly relate in proportion and scale to the arches beneath them.

Endnotes

/1. Other changes in the hydro installation did not affect the appearance of the plant. These changes occurred in 1941, 1942, 1949, 1956, 1960, and 1967, and involved the installation of new 60-cycle units in various wheelpits, the replacement of hinged wooden flashboards by new ones of steel, and the installation of a fishway by the State between the plant and the log sluice. see "The Milford Water Power Project, Application for Amendment of Major License", U.S.A. Federal Energy Regulatory Commission, by Bangor Hydro-electric Company, March 1985 (n.p.).

Joseph R. Bodwell (1818-1887), a native of Methuen, Massachusetts, exemplifies the 19th-century American self-made businessman of enterprise and vision. He was left to find his own way at eight and having taught himself a trade and obtained an education, he became expert both in granite quarrying and water power potential (he led in the development of the granite works of Vinalhaven and Hallowell, but participated actively in many other ventures including lumbering, stockbreeding, and Republican politics, and was elected Governor in 1886). One of his ventures, the new Milford Land Company (officers were Bodwell, Francis Cobb, W. H. Mailing, and his son Josiah W. Bodwell) purchased in 1880 or 1881 the Milford Mill company, whose mill was on the site of the Bodwell Power Plant. Bodwell apparently foresaw that the fullest value of the purchase lay in the exploitation of the water power here, the greatest on the Penobscot (92 feet above the river at Eddington Bend). The company continued to operate the sawmill and to improve and replace its machinery, which was leased to various operators in the normal way. They were already supplying power to other mill operations in the 1890s and regularly received applications for more power, and for the construction of new pulp mills on their property. Their mill was damaged and rebuilt in 1888. The culmination of the demands for more abundant power was the construction in 1905-1907 of the brick Bodwell Plant and a new concrete dam, which unlike all but its most immediate predecessor here, completely spanned the Penobscot.

In the late 1880s, company directors included Charles Hamlin and Joseph S. Wheelwright, important Bangor men. (The first was a U. S. Commissioner [of Customs], a lawyer and a director of Old Town Woolen, and the second an important wholesaler [distributor] of lumber, dry goods, clothing, etc.) Governor Bodwell's son was a director of the company through the 1890s but by 1905 control had passed to other local men of longstanding importance in the social and economic history of the Penobscot River basin. Charles V. Lord and Franklin Wilson of Bangor (the first important in timberlands, banking and iron foundries and the second in law and previously president of the Maine Central Railroad), and Eben and J. Fred Webster proprietors of important pulp and paper mills, who were descended from early Orono settlers and mill owners (by this time J. Fred Webster had moved to Bangor). Financial and real estate arrangements for the project were carried out by the major Bangor real estate developer Carl P. Dennett, and construction by James B. Mullen of Bangor (Mayor in 1911 and 1912) and by a company apparently formed for the purpose by some of the same men and other prominent local entrepreneurs. This was the Milford Construction Company, whose directors were J. Fred Webster, Wilson, Dennett, John Leland Crosby (descendant of one of the oldest Bangor families whose fortunes were founded in shipbuilding, and a banker), and A. B. Leach of New York, the financial agent for the Bodwell Water Power Company.

As has been noted, the planning and construction dates of the Bodwell Power Plant coincided with those of Union Station, Bangor (Henry B. Fletcher, Boston, Architect). While it was absolutely typical in this era to build sumptuous palace-like public buildings such as city halls, libraries, observatories, and rail and ship terminals, the

location of the Bodwell Plant is what makes its sophisticated architecture so surprising. None of the men involved could really have expected Milford to turn into a culturally ambitious city like Bangor and it seems more likely that they were actually influenced by the handsome buildings then being constructed in Bangor, Orono and Old Town to build at a similar level of pretension. Union Station and its great train shed come to mind first and were probably a very strong influence because these men were aware of the planning for it (some were directly involved through banking and railroad connections) and because all lumber, sawn and unsawn, for long had left Milford by rail. The use of the same two types of "special brick" on the interior as in the station has already been pointed out. (Other significant local public buildings of the era that would predispose them to architectural display included Bangor City Hall (1902-03), Penobscot County Courthouse (1902), Eastern Maine Medical Center, several brick schools in Bangor, and two fire stations (1897 and 1902), the Morse-Oliver and Elm buildings, and even the Eastern Steamship Company Terminal, Bangor. At Orono, a number of significant Romanesque Revival brick buildings, including Coburn, Oak, and Wingate Halls and the Experimental Station had recently been built.) However, the most immediate inspirations for the plan of the Bodwell Power Plant lay on the site and across the river, in Old town. In 1888, the first textile mill, greeted by citizens as the herald of a new industry which would diversify and strengthen the city's economic base, was built at Old town. This mill was apparently designed by Lockwood, Green and Company, Boston mill architects and engineers, because S. G. Green was mentioned in the Industrial Journal as having been in charge of the building's construction and being satisfied with the project as it neared completion; Lockwood, Green later designed the Ounegan Woolen Mill. Adjacent to the mill was its power plant, called "the water works", the two-story seven-bay block south of the mill's great stack (its third story was added later). Its wheel pits were designed "to furnish power for two more mills of equal capacity with the ... [woolen] mill". Thus, it served the adjacent factory and external users of power.

The Bodwell Water Company Power Plant was designed to generate 12,000 horsepower at all times. Long-term contracts were made to supply Eastern Manufacturing Company, South Brewer (pulp and paper), Old Town Woolen Company, Nekonegan Paper Company, Old Town, the Old Town Electric Company, and Ounegan Woolen Company. The project cost about one million dollars and was the largest electrical development constructed in Maine up to 1906. The Gilman Falls Dam built at the same time by the Bodwell Company on the Stillwater River near the mouth of the Pushaw Stream also contributed to the power available for sale.

The Old Town Woolen Mill was a well designed Italianate brick mill with a particularly handsome arcaded romanesque tower over the main entrance bay. Old Town had many mills (most have disappeared) but with the exception of buildings at West Great Works, this was the only brick mill of any pretension built there and, what is more to

the point, it included its own hydro building in its 330-foot length. This handsome presence on the Old Town bank would have called for a comparable response when the Bodwell Plant was being planned.

On the site of the Bodwell Plant in the 1880s and 1890s was the frame sawmill purchased from the Milford Land Company. It was separated by a sluice from the two connected frame buildings, the nearer labeled on Sanborn maps, "Electric Light Station", and the other, "Jordan & Stewart" (owners of a barrel stave mill upriver towards Sunkhaze). The dam crossed the river at an angle from the corner of this mill. The site of these structures is included in the present dam. Although the Bodwell Plant had to be rebuilt in 1888, probably after a fire, the plan in the Sanborn maps is unchanged. However, it is quite possible that its dominant feature, the lantern, was first added in this rebuilding.

The former Milford Land Company mill was a long rectangular pitch-roofed structure with open bays or large doors on the south side and lower pitch-roof additions at each end. As noted above, it carried a gabled lantern on its entire length. This feature was probably so effective as a source of light and so much a part of the landscape that it suggested itself, or was suggested, to Wallace C. Johnson, as an element to be retained in the new plant. Indeed, if it was part of the designer's conception from the beginning, it may have been the starting point of his cathedral-like plan.

Unfortunately, it has not yet been possible to find out any biographical details about Johnson nor the reason for his early death before the project was completed. His drawings are splendid but rather than being "architectural" in style, they are clearly the work of an engineer. Johnson was in fact both a civil and a mechanical engineer.

Lawton, R. J. City of Old Town and Its Environs (reprint of 1906 pamphlet).

Merry, Silas Everett. A Study of the Milford Power Plant with Suggestions for Improvement, B.S. Thesis in Electrical Engineering, University of Maine, 1920.

Milford History: A Penobscot Village from 1800 (Milford, Maine, 1976), esp. 41.

(Bangor, Maine) Penobscot Registry of Deeds, various maps cited in text.

Richardson, C. R., and R. W. Wetherbee. The Hydraulic and Electrical Features of the Milford Power Plant, B.S. Thesis in Electrical Engineering, University of Maine, 1913.

Sanborn Map and Publishing Company, 1884 maps.

Sanborn-Perris Map Company, Ltd., 1889, 1901, 1906, 1912 maps of Old Town and Milford.

Souvenir of Old Town and Orono, ca. 1900, with engravings of local landmarks including Bodwell Company sawmill (University of Maine Library, Sepcial Collections).

Thompson, Deborah. Bangor, Maine 1769 to 1914: An Architectural History (Orono, University of Maine Press, to appear April, 1988), 490, 491 (Union Station).