

22 April 2007
Revision 3

A step back into the Atlantic Shore's early history
Still very much alive
By Donald G. Curry, Interim Shop Manager
Seashore Trolley Museum
with input from Iain M. Taylor and O. R. Cummings

It was a surprise call from our contact at A. C. Electric, Roger Paradie that was the genesis of a 'field trip' back into living trolley history. A.C. Electric is doing the overhaul work on Atlantic Shore Line's locomotive 100's motors and air compressor. Through that we have developed a very good working relationship. Roger did the excellent overhaul work on Connecticut Company open car 303's air compressor which now runs as well as it did when it was built over 100 years ago. Therefore we knew he would be able to help us out with Cleveland 1227's compressor whose commutator was sparking to the point it looked like it would soon self-destruct.

He travels all over New England doing trouble-shooting, so we had asked him to come over if he was in the area. When he came over, he had just been at New Dam, one of the Atlantic Shore Line's important sources of power, which was still operating and producing electricity for the power grid.¹ It had suffered a bearing failure in one of its generators and A.C. was participating in the rebuild. He had finished there and had some time available before heading back north to Auburn, so he put his practiced eye and 'Fluke' (meter) on 1227's compressor, which was easily accessed through the trap in the car's floor. He rotated the brush yoke just a bit and the flashing went to zero except for a very small bit when the compressor started up.

At New Dam

When I asked him about the work at New Dam, I also said that we'd very much like to see it and explained its significance to Seashore. So, on the March 30 he called to say that they would be working on the generator and would be very happy to have us come over. As it turned out he wasn't needed there but the dam maintainers would welcome us. Thus inspired to get some real live trolley history, **Bob Reich**, **Randy Bogucki** and I, with the aid of the Delorme *Maine Atlas*, took a field trip over to New Dam.

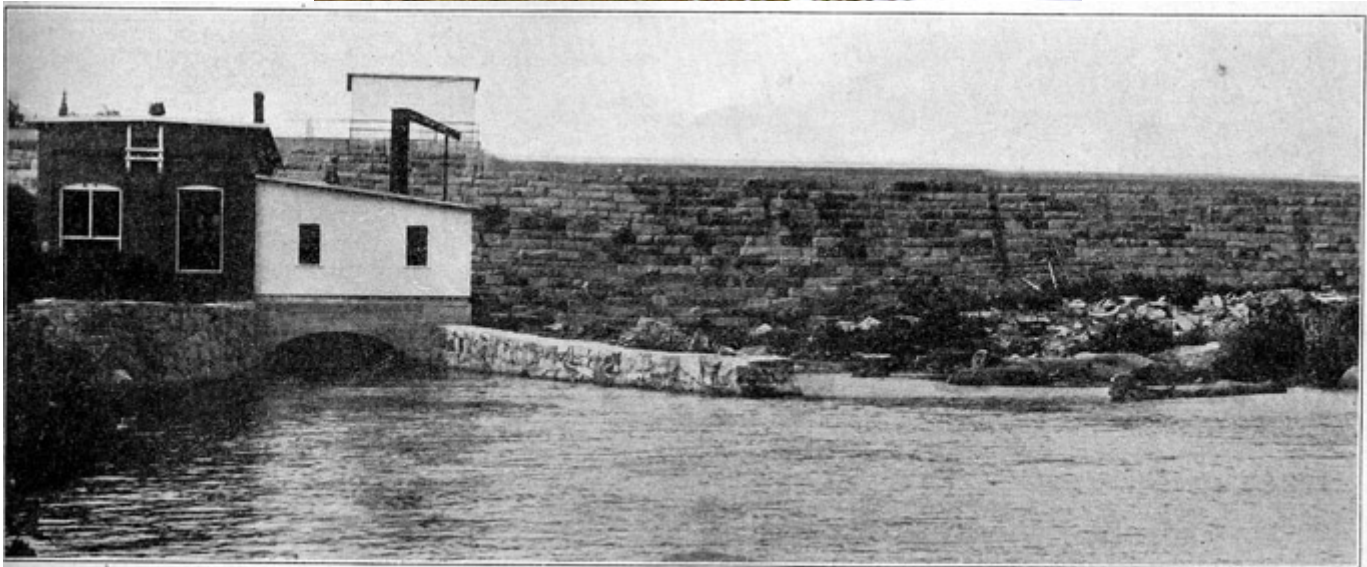
It's located about 12 miles from Seashore on the Mousam between Sanford and Alfred, the river being the town line. Turning off New Dam road, you come to the former ASL/S & CP² right-of-way, now a dirt road. This made Seashore's roads at their worst seem like the Maine Turnpike. The gate was open so we made our way cautiously in, wondering if we would leave the exhaust system on my Volvo somewhere behind or require a bulldozer to yank us out of the mire. Fortunately we made it, went around a sharp curve and there ahead of us, was the dam with water roaring over it. A little further and we looked down at the brick power station and attached wood leanto, just as we had seen it in O.R. Cummings' *Atlantic Shore Line Railway History*³ and an article in a 1907 *Street Railway Journal*.⁴ On the end of the station toward the dam was a granite stone in the peak carved '1906'. We went down another steep grade and were right in front of the station, with the water racing by in the spillway canal at our feet and roaring over the 40 ft. high stone dam behind the station.

¹ I like to say that the electrons powering this computer came from these dams.

² Sanford and Cape Porpoise Railway

³ June 1950 Connecticut Electric Railway publication, re-issued Jan. 1957

⁴ Volume XXX, No. 24 page 1132



Atlantic Shore Line Railway— Dam and Old Falls Power Station.
 This sure looks like New Dam to me.⁵



⁵ It's from the *Electric Railway Review* of 24 August 1907. The reporter obviously hadn't done his homework.

At the door we were met by Iain Taylor, who is in charge of maintaining 17 similar stations owned by Ridgewood Renewable Power LLC. He gave us a complete tour, answering our questions in his thick Scottish accent.⁶

The most obvious sight in the building was a large 1960s-era Westinghouse generator that had obviously been picked up by the original very-much-hand-operated chain fall which ran on tracks up near the high roof. He said that we (he and his helper) had all they could do to lift it. They had pulled it away from the shaft of the water turbine extending in through the beautifully arched brick wall. It was on this shaft that the offending bearing had run. The bearing had been sent to American Power Service in Georgetown, MA for reabbtting, the same place where 100's armature bearings are presently undergoing the same process.



The 1960s era Westinghouse generator.



Iain Taylor showing the new generator controls.

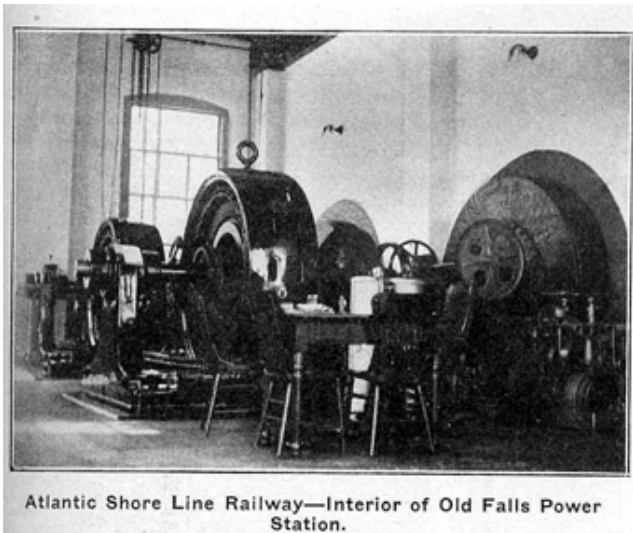
Next to it was the other generator, a GE whose latest patent date was 1905. It was purring away putting out its maximum output 3-phase current at 2,300 volts, as it has done for over 100 years! Interestingly, its turbine had been overhauled with modern style vane type water flow regulators while the 'new' generator had the older style sleeve type regulation. The latter consists of a tube fitted inside the huge penstock with a hole (holes?) that is moved in or out automatically by a cable device, thereby regulating the flow of water from the penstock. Ian prefers that type.

⁶ You're quite correct. I did start my working life in ships' engine rooms. I quit what people call "Formal education" in 1955 at age fifteen and went to sea on a fish processing ship working the edge of the Arctic, from Greenland to the Russian north coast. During this time, my chief engineer kept me at the books and I got my unlimited license as soon as I was old enough to hold it (age 21). Following thirteen years at sea, I was summoned ashore to run the company's small shipyard.

In this country, I started out with Westerbeke Corporation, building small diesel engines and generators for high end luxury craft and during my eleven years there, held most of the technical positions in the company. I wandered out to New Mexico for a few years and spent the time there as a manufacturing engineer for a big machine/fabricating shop, dealing with mining equipment and heavy manufacturing for the National Labs during Ronald Reagan's "Star Wars" period. Back in New England I went to work for Eastern Utilities cogeneration division who, after a few years, sold me along with the rest of the hardware to Ridgewood Power Corp. Where I enjoy my work and the freedom to do it.



The turbine on the Westinghouse generator



Isn't this really New Dam?



Randy Bogucki studying the name plate on the 1905 generator

He e-mailed me that he had replaced three bearings including one under water. The penstocks, large iron pipes, some riveted and some welded, are rather impressive.

Combined from the 1907 *Street Railway Journal* and *Trolley Days in the Kennebunks*⁷ . . . The new hydro-electric station is a brick building with a frame addition for the penstocks. The equipment consists of two 24-in. 500-hp Victor turbines direct-connected to two Westinghouse 300-kw, three-phase, 60-cycle, 2200-volt (currently 2,300 volt) generators (alternators). Three water-cooled transformers are installed to step-up the generator potential to 10,000 volts for transmission to Sanford where a railway substation with three step-down transformers and a Westinghouse 250 kw rotary converter had replaced the storage battery in the addition to the former Mousam River Railroad's freight house.

(When New Dam was) placed in commission some time after 9 April 1906 it was located at the so-called Estes Privilege on the Mousam River about 2 miles east of Old Falls. Built by the Alfred Light and Power Company, organized by ASLRy interests and incorporated March 18, 1905, was a 850-foot long masonry dam (large granite blocks-ed.) across the stream to create a huge reservoir known as Estes Pond (or Lake) 5 ½ miles long, ¾ mile wide and an average of 18 feet deep. From this dam a penstock seven feet in diameter extended to what became

⁷ Unpublished 2007

known as New Dam station, from which another penstock, with a diameter of eight feet continued on to the Old Falls plant. (This apparently was never built.—ed.)

Because of the spring snow melt, flow over the dam was at a maximum with excess water roaring across the top of the dam as it fell 40 ft. back into the Mousam River on its journey down to Old Falls dam, a half mile or so toward Kennebunk. We then walked back up to the top of the hill but, instead of leaving, turned left toward the river, following the right-of-way down quite a steep grade (4% or so) about ¼ mile coming to a striped jersey barrier warning the unwary that this was the end—next stop 20 ft. down to the rushing river. This was the site of the 101 ft. long trestle the trolley line crossed to get to the north side of the Mousam. The granite foundations for both ends were solid and ready to receive a bridge again, should we want to replicate it and extend our line a bit.

From the *Biddeford Journal*: Above Old Falls, half a mile or more, the highway through the woods (Alfred Rd. and Old Falls Rd.-ed.) which the trolley line has followed for two or three miles, is crossed by the Alfred and Kennebunk road near Whitcher's mill.⁸ The railroad (the S & CP⁹) might have crossed the river by the bridge at the mills (Whitcher's), but the builders took another course. The crossing of the stream is higher up, by a bridge build especially for the railroad. The approach to it is through thick woods at a point not far from where the trolley line leaves the highway for a long and nearly straight plunge across country.



Could this have been the inspection trip?

It is a solid looking structure—this bridge—and everybody feels perfectly safe about it, for Railroad Commissioner Chadbourne had been over it a few days before and he is no light weight either physically or in knowledge of railroad and bridge construction. When the railroad commissioner put his 250 pounds on the middle of it and looked it over carefully, he said, “That bridge would hold up five locomotives, placed one above the other.”

Looking north toward Old Falls Road

⁹ The Sanford and Cape Porpoise

It is a first-class bridge with solid granite abutments, and it was built to stay, like every other part of the road construction.

The view from the bridge up and down the green bordered banks of the river is a charming one, and travelers would like to linger here, but the glistening parallels of steel point onward and Sanford and dinner are yet six miles away. It is a pretty vista that one gets in looking forward or back along the straight reach of road through the woods. The trees border the track closely, but nearer are the two rows of poles, one on each side, which carry the wires and support the trolley insulators. The eye follows the poles down the track for a mile or more until they seem to converge in the distance. At one point in particular at the top of a grade, a view of more than a mile each way is obtained.

We could see the right-of-way and its power line continuing on to the northeast. Following it back up the hill as we left, we could also see it extending toward Sanford at least a mile.¹⁰



Looking up toward Sanford from the bridge site.



The end of the power line-behind CYRO where it connects with C. M. P.

Biddford Journal: The poles carrying the feed wires and the supports for the trolley wire run along one side of the track, while on the other side, are the wires which convey the high tension current for transmission into mill power at the village. Each of the latter poles is numbered and contains a warning calculated to impress small boys and bigger ones with the desirability of keeping at a distance from the top of them for sanitary reasons. That bigger yellow copper cable up there is nothing more or less than a channel for "greased lightning". At least its effect on a careless tamperer could not be distinguished from that of lightning. It carries a current of ten thousand volts.

"Throw a wet string over that wire and you'd quit this earth in a second," suggested one of the party on the special. But that is a trick that has yet to be tried.

We had asked Iain if it were possible to see the Old Falls plant. He said that he couldn't leave his work at New Dam but showed us the combination to the locks. We drove down the main road, and crossed the Mousam on Witcher's Mill Road . . .

(From Iain's e-mail) I don't know if you walked over to the headworks at New Dam, but there are two old millstones embedded in the concrete surface. I've always wondered if they came from Witcher's mill. Roger sent me a copy of the literature you gave him. Included was a mention of Witcher's mill and its location. I'm fairly confident I could point out the remains of the millrace from the bridge on Witchers mill road. There are two stacks of cut stone about 3 or 4 feet apart just upstream of the road bridge and it sure fits the location and looks like there could have been a wheel there once.

¹⁰ The line extends practically straight toward Sanford but, although it is kept clear for maintenance, is still not passable. It emerges just beyond the side gate of CYRO industries, not far from the Sanford Municipal Airport.

By the way, You may remember I noted New Dam tailrace was a lot higher in the old photos than it is now. You may also remember that I think I spotted the remains of Whicher's millrace. I now spotted more masonry directly across the river from the millrace, so it's quite possible, even probable, that there was a small dam there in 1907, thus the higher tailrace at New Dam.



Old Falls Under Construction

. . . and then easterly down Old Falls Rd. a mile until we came to the gate, which Randy, with his newfound knowledge of the 'key', opened and we went down the half-mile road (much dryer than the one to New Dam), gradually descending to Old Falls Pond and the dam. Around a sharp left turn and down about 60 ft. we followed the road paralleling the huge penstock to the (now) unimposing York (Old Falls) Hydroelectric Power Project station.

Biddeford Journal, "Where the Power Comes From: Something about the Plant which produces the highest voltage in Maine"-18 Sept. 1899) It will be two years next month since work was begun on the power plant which is the heart and lungs of this great industrial system (the Goodall woolen mills in Sanford-ed.). With a delay caused by a washout at one end of the dam, work progressed steadily at Old Falls, and in February of the present year, the water was let into the big penstock and the wheels set running for the transmission of power to the mills in Sanford. From the long dam which stretches across the river at Old Falls and pushes the water back for miles in an enormous pond, a penstock nine feet in diameter and 450 feet in length conducts the water to the big wheels connected direct to the generators in the power house. An iron pipe nine feet in diameter is a thing to be gazed at with respect. It is almost if not quite big enough to drive a horse and buggy through.¹¹

The electrical energy now converted from water power at Old Falls and sent over the wire into the transformer, amounts to 1,200 horse power at the mills. This enables a corresponding amount of steam power formerly used at the mills to be done away with. The big boilers and steam engines in the mills now lie idle, and are not used except as reserved power in the event of accident to the electrical equipment. Some parts of the mill plant are still run by steam, but a large portion of the Sanford mills and the Goodall Worsted manufactory depend upon the converted power from Old Falls. The saving in coal thus affected is immense.

¹¹ What no longer exists is described in the 1899 *Journal* article: When a stream of water of this size shoots along at the rate of nine feet in a second through a pipe 450 feet long, it is a somewhat awkward proposition to handle without the most careful precautions. To arrest its progress too suddenly would be attended with dangerous consequences. It can't be shut off at once with a turn of the wrist like a stream from a garden hose. It has to be given a chance to disport itself a little. At the power station where the big valves are which cut the flow of water from the wheels, they have an arrangement to obviate the trouble. From the upper side of the penstock, a stack seven feet in diameter and 72 feet long rises straight up through the roof of the power house. It is bent over so that it points toward the canal at the side of the house. The sudden stopping of the flow of water into the wheel pits drives it up through this stack to discharge in a seven foot stream over the roof into the canal. After the initial velocity of its rebound is reduced, it is controlled by relief valves.

This power plant at Old Falls is controlled by the Sanford Power company of which Hon. E. M. Goodall is president. Besides furnishing power to the mills it has a thirty-year contract with the Sanford & Cape Porpoise Railway to provide them with what power they need.

The entire electrical plant of the Sanford Power Company is under the direction of William Davis, as superintendent. He is an expert electrician and has general charge of the power at the mills and for the railroad. It might be noted also that he and his assistants have the distinction of handling the highest voltage produced in the state.

Sydney Spinney and Homer Goodwin are the engineers at the big power station. They live with their families in a two-tenement house built for them by the power company at the top of the hill overlooking the dam and mill pond. The house is of modern architectural design, handsomely finished outside and in. It is lighted by electricity, and its water supply is from a tank at the highest point of the hill to which a small pump forces water from a spring. Both the residence and the power station are connected with Sanford by telephone, and the electric car spur track (never constructed-ed.) will run close to them, so the dwellers in this rather remote spot are not nearly so isolated as would seem at first thought.

Not the least wonderful thing about this new artery of traffic through the center of the county is that it is run by converted water power from the little "Niagara" in the woods at Old Falls on the Mousam, where the same great generators which supply it with the electric current, furnish also the force which turns the wheels of Sanford and Goodall mills. It is the first practical application of the principle (*sic-ed.*) of electrical transmission of power in York County and the most extensive plant of the kind in Maine.

The ten thousand volt current which is flashed along the big copper conductors to the mills is the most powerful thing in the electric line east of Boston. It is the nearest approach to chain lightning, bound and fettered, that Maine has yet produced.

From Iain's E-mail - A couple of years ago, late summer, I was at the gate leaving the plant, when a couple of ladies pulled up in a car. One was quite elderly and accompanied by her late middle aged daughter. They wanted to go in and see the place. It seems the old lady's father was an operator down there in 1914 and she was born and lived at Old Falls in the house built for the operators, till it burned down. They went down to visit and I waited at the gate till they came back. I now regret that I didn't think to get her name, but she said she had a whole lot of very pleasant memories of living there.

At Old Falls



This time Bob got the privilege of using the 'key'. Inside was the generator in its bright blue paint and its attached gray turbine, faithfully producing power and with the usual impressive bronze plate facing you as you went in:

ALTERNATING CURRENT
GENERATOR
No. 765236 P. F. .8
TYPE ATB 18-750M-400 Form 6 KW 600
VOLTS 2300 AMP 188 SPEED 400

PATENTED
 NOV. 20.00 APR. 2.01 DE0(?) 2.02
 GENERAL ELECTRIC CO.
 SCHENECTADY, N. Y., U.S.A.

The 1907 *Street Railway Journal* said

the station “was purchased some time ago from the Alfred Light & Power Company. . .contains Smith turbines connected to three 500-kw Westinghouse a. c. generators, one of which is an a. c. – d. c. generator. (rotary converter-ed.)

The big cast iron name plate on the end of the turbines at both dams:

MFG. BY
 S. MORGAN SMITH Co.
 YORK PA.

The whole turbine is visible at Old Falls and has a plate on the side:

RODNEY HUNT MCH. CO.¹²
 HIGH-TEST
 TURBINE-WATERWHEELS
 ORANGE, MASS.
 U.S.A.

Interestingly enough, the 1907 *Electric Railway Review* gives slightly different details:

(This must have supposed to have been the New Dam. The report must have had a deadline and didn’t check his sources.)

The dam is 850 ft. long and 38 ft. high and the reservoir is three-quarters of a mile wide and five and a half miles long. The station is a brick building 30 feet square, with a frame addition to house two 8-foot penstocks. This station contains two 500-horsepower Victor Turbines, direct connected to two 300-kilowatt three-phase 60-cycle generators, producing current at 2,200 volts. Regulation is secured by the use of two improved Lombard governors. Step-up Westinghouse transformers are employed to secure 10,000 volts for the transmission lines.

The Biddeford Journal’s also differ in its own way:

The electrical plant which is located in a brick building at the foot of the dam consists of two 800 horse power alternating generators for supplying power to the mills, and one 800 horsepower combination generator, giving a direct current at one end and an alternating current at the other. From this combination generator, an alternating current of 400 horse power at the generator is conducted to a point half way between Kennebunk and Cape Porpoise to be eventually used as a feeder for that end of the line. Here it enters a rotary transformer (rotary converter-ed.) which acts as an alternating motor and a direct current generator. From the direct current end of the generator at the power station, the current is fed into the middle of the line for five miles each way.

O. R. Cummings’ description in his latest history describes it even differently:

Power for the Sanford & Cape Porpoise was furnished by the Sanford Power Company, organized by the Goodall interests in 1897, which placed a hydroelectric plant at Old Falls on the Mousam River in Alfred¹³ in commission on Feb. 20, 1899. The installation included a masonry dam 215 feet long and from 16 to 20 feet high across the Mousam and a penstock 450 feet long and nine feet in diameter extending to the generating station, a one-story brick building. Equipment of the plant consisted of three turbines, each rated at 600 hp on a 64-ft. head; two Westinghouse 500 kw 400-volt alternators and a Westinghouse 500 kw generator delivering direct current at one end and alternating current at the other. The direct current was applied directly to the street railway’s feeder cables near Old Falls while the alternating current was stepped up by transformers to 10,000 volts and transmitted over high tension lines to Sanford and to a railway substation, a wood frame building, in the vicinity of Town Landing Corner (near Durrells Bridge-ed.) in Kennebunk. This was equipped with three step-down transformers and a Westinghouse 300 kw rotary converter which changed the alternating current to 440-volt direct current.

¹² Museum member John Laflamme, who sold water turbines for Allis Chalmers, laughed when he saw this name as he was very familiar with them. He also said there are numerous small power stations all over Maine like this one.

¹³ On the DeLorme map it looks like it’s in Kennebunk.

He also was surprised that we hadn't noticed the leak in the penstock.¹⁴ I guess we were so impressed with the size and authentic noise that we didn't.

The power station as it exists today is much smaller than in its three-turbine days. In front of the building is a concrete 'patio' about twice the size of the present unimpressive brick structure, probably from the 1960s. It would appear that one turbine was here and the other behind the building as only the middle 'exhaust' penstock, extending below the station, shows water in motion from it.

The Patriot's Day Storm

On Monday night, 16 April, the second day of the Patriot's Day storm¹⁵, I received this message from Iain:

If you want to see a spectacle, take a drive over to Old Falls tomorrow. I've never seen so much water there, even during last year's flood. It really is spectacular.

I was up there all day today. A tree came down across our power line and I had to get a line crew in there to repair the lines.

Don't even try to go to New Dam. Estes Lake is over the access road at our gate and the road is softer and more rutted than your last trip there.

With an invitation like that, how could anyone refuse? After attending my Rotary Club meeting, I did some photographing of Walkers Point and the breakers along Gooch's Beach in Kennebunk before heading toward Old Falls. On the way I encountered one road blocked off by piles of stone and an overgrown stream preventing any passage. Although Iain said I could let myself in, it was by fortunate chance that I happened to meet him at the gate.

When we got there he said, "Well, I see we still have a dam!" Water was pouring over it at a fantastic rate so one can't help but admire the craftsmanship of the builders of this now 115 year old structure, still serving its original purpose. When we visited there two weeks before, the water was pouring over it at an impressive rate but this was beyond impressive (whatever that is)!

The station continued to pump out its power faithfully. Inside the station on the desk is the computer which controlled the dam with the screen showing "Gen 1 ONLINE" (It's almost anachronistic to see this setup here but time marches on while the generator remains): 480 KW Sept., KW 316, 2300 volts, Frequency 60.01, 401 RPM¹⁶. Pond level 103.02. (feet), Set Point 100.13¹⁷

So the pond was about 3 feet deeper than it was set for.

¹⁴ He thinks it was caused by frost heaving the pipe. To the uninitiated it just looked like water from snow runoff. It had been repaired at some previous time by inserting another pipe inside the original—that must have been quite a feat!

¹⁵ Ultimately this became, according to Maine's Governor John Baldacci, the "worst disaster that had happened to the State of Maine since the 1998 ice storm". About 120,000 electric customers were without electricity, some for a week. This 'nor'easter' dropped as much as eight inches of rain in Southern Maine, fortunately causing Seashore relatively little damage and no power interruptions. This was considerably different from the 5 April storm which put Seashore's lights out for three days.

¹⁶ Note from Iain (22 April): Almost all modern small hydro generators such as these require a rather expensive step-up gearbox or speed increaser, with appropriate accessories such as pressurized lubrication, cooling systems etc. The turbines still run at low RPM, but most commonly used modern generators require a higher speed, usually 900, 1200 or 1800 RPM. These old models, such as New Dam, Old Falls and many others, require no such devices.

¹⁷ A note from Iain re the computer readouts (22 April).

Computer read-out at Old Falls shows KW setpoint 480 KW. The setpoint is just a little above generator capacity, for good computer response. The turbine will normally generate about 460KW, and occasionally a little over. During your visit, it was doing only a little over 300. This was because of high tailrace. That day the end of the draft tube (Exhaust pipe) was several feet under water, restricting flow through the turbine.

The end of the draft tube is best about six inches below the surface. This ensures a good seal at the lower end of the tube, which actually generates a vacuum, drawing even more water through the turbine and a lot more KW.



Old Falls power station water levels at each visit—before and after the storms.



Old Falls Dam before and after the storms.



The penstock leading to the power station. The Mousam River.
Note the discarded penstock gate and the remains of the snow.

In both stations we had noted large new cabinets with multitudes of digital and analog meters and computers with specialized software just for monitoring power stations. There no longer is a need for an operator as Iain had told us that he could monitor and control the generators from his home computer. When the bearing on the generator at New Dam failed and allowed the entire armature to move forward toward the turbine, it automatically shut down and notified him of the problem.

Old Falls was in former years a favorite picnic resort for people from Sanford and Kennebunk, and even from Biddeford and Saco. Naturally, it has been less used for this purpose since the work on the power plant began, but the plant itself is an attraction, and the beauty of the surroundings has not been injured by the building operations, so many visitors still go there of a Sunday to loiter by the shady banks of the stream or to watch the revolutions of the great generators in the power house.

The *Electric Railway Review* of 1907 stated that:

“the company also maintains a park on its line at Old Falls for picnics, concerts and celebrations.”

O. R. Cummings noted that:

the land was purchased by the Sanford Power Company as part of its hydroelectric station site was Fluellen Park., which had been a favorite picnic ground of Sanford and Kennebunk resident for many years prior to 1897. Named after Fluellen, a 17th Century Indian Chief whose tribe owned much of the land later embraced by the towns of Sanford and Alfred, the property was tidied up after the power plant was in operation and improved picnic facilities and even a dancing pavilion were provided. The resort was renamed Old Falls Park and continued to be popular with picnic and outing parties long after 1899. A proposed spur from the S & CP track into the park never materialized but the railway did construct a turnout, know as Old Falls siding in the area.

So visitors must have had to walk the half-mile or so from the trolley line to the ‘park’.¹⁸

As we drove back we looked around but could see no evidence of any kind of ‘park’. We left, closed and locked the gate and turned right (east) on Old Falls Road, continuing into Alfred Road in West Kennebunk. Although there is a wide area to the right (south) of the road which looks temptingly like the old right-of-way, Ron Newton, whose house is at the corner of Thompson and Alfred Rds., says it was on the north (his) side, running practically through his front yard. He has a photo showing the tracks there. From there it

¹⁸ As you drive in toward the Dam, on the left, there is a high plateau on the left, now occupied by a somewhat dilapidated storage shed for the power company. Iain feels this was the operators’ dwelling. On the right, a bit further down, overlooking the pond, is another level spot which must have been the Park. Because it has so grown over, it’s difficult to imagine what must have been there. Iain says this is a great place for ticks.

continued toward the center of West Kennebunk, crossing the roadbed of the former Eastern Division of the B & M RR, near Cummings Market, where the S & CP had a connection. Because of the bridge over the Maine Turnpike, all possible traces are gone. It then continued down Fletcher St. where we turned off down Ross Road and back to Town House Shop—back to the ‘real’ world of restoration.

Since that day we have thought many times of what it must have been like in the power stations when they were equipped with the big old fashioned style meters and switchgear, all manually controlled and kept polished by the resident plant operators. But we also imagine our 100 hauling a string of coal cars up the grade from the bridge over the Mousam, toward the Sanford Mills. Harder to imagine are our two York Utilities four-wheel Birneys, making their one and only trip from Town House, where they were changed from the Denver and South Platte 3 ft. 6 in. gauge to their now standard gauge, to their 20-plus years running in Sanford. Of course, what would it have been like seeing several of the big 15-bench opens headed for the Cape Porpoise Casino, filled with families on their way to enjoy the coastal scenery?

We’re gradually figuring out the route, comparing what we see with what is described in the early accounts of riding the S & CP Ry and looking at contemporary maps. Seashore member David Shaw found the Coast and Geodetic Survey maps of the area which give an indication of the route but we found the Delorme *Maine Atlas and Gazetteer* map no. 2 gave a pretty good idea. We still have to explore the approach into Sanford.

There is much more to the ASL power system but the point of this article was to highlight the parts of the Atlantic Shore Line that are still alive (in more than one way) and well. Of course we also have 6 of their vehicles in the Seashore Trolley Museum collection.¹⁹

After reading the first version of this article, O.R. Cummings said: “My descriptions of the equipment of the Old Falls and New Dam stations were drawn from information available to me at the time *Atlantic Shore Trolleys* was written. I have no data on any changes that may have been made over the years.

I wish we could find somebody with the time and interest to go to the Kennebunk Library and go through the microfilms of the Eastern Star (predecessor of the York County Coast Star) from 1899 through 1927. There would be all kinds of information on the S&CP, the ASLRy etc. Might even find a report of the hearing on the ASLRy’s petition for locations in Kennebunkport. Some of the wealthy residents of the town rose in opposition and I suspect one of them was George Herbert Walker.”

Anybody interested?

More still out there. There is still considerable information in hand but the file is getting pretty big for this dial-up connection. Let’s see it flies. DGC

Post script. In April 30, 2008 we received an E-mail from Iain Taylor:

Don: Thank you; how very interesting. I'm sorry, I've been meaning to get in touch with you for a long time. I've kept all the stuff you sent me last year and these will be added to the file.

Following last year's flood, you may remember the water intake racks at Old Falls appeared damaged. Well, shortly after your visit, I tried closing the headgate and couldn't get it to move more than a couple of feet. Later in the summer, we dropped lake level about 8 feet and found the lower sections (18 feet) of intake rack collapsed, together with their support structure, and piled up against the headgate.

We ended up lifting out the whole lot and replacing it, together with a much improved support structure, I might add. The original support structure spanned the whole width of the masonry abutments, a matter of some nineteen feet. I replaced that, but also supported it immediately on each side of the headgate opening, so now unsupported span is only nine feet, as opposed to the original nineteen.

¹⁹ Locomotive 100, Laconia Car Company, 1906, built for the Atlantic Shore Line Railway
 Box trailer 8, Portland Company, 1892, built for the Mousam River Railroad Company
 Railway Post Office Car 108, Laconia Car Company, 1904, built for the Portsmouth, Dover & York
 Birney Safety cars 80 and 82 (nee 1 and 2), American Car Company 1919 for the Denver and South Platte Railway,
 operated by the York Utilities Company 1925-1947
 Lightweight car 88 (nee 14), Wason Mfg. Co., 1926, for the East Taunton Street Railway, operated by the York Utilities Company,
 1928-1947.

Old Falls faithfully generates up to 460 KW regularly, with alarms and shutdowns only when Central Maine Power goes down.

New Dam is equally reliable, generating up to 535 KW as long as we have water.

Sources of information:

Electric Railway Review, Vol. XVIII, No. 8, August 24, 1907 pps. 214-218.

Street Railway Journal, Vol. XXX, No. 4, December 14, 1907, pps. 1137-1137.

Trolley Days in the Kennebunks: Kennebunk, Kennebunkport and Arundel by O. R. Cummings, unpublished document, 2007

“New Traffic Artery”, *Biddeford Journal*, September 18, 1899.

“By Trolley to Sanford”, “Hits Drummers’ Fancy”, “Sunday on the Electrics”, all from *Biddeford Journal*, 1899 (issues unknown)

David Shaw has spent considerable time researching remains of the ASL and recommended this as a source of information on the location of the right-of-way:

Here are the links to the Historic USGS Map collection at the UNH LIBRARY Government Documents Dept. Historic USGS Maps of New England & NY.

- The first link is for the website itself:

<http://docs.unh.edu/nhtopos/nhtopos.htm>

- The next link is for the Maine Towns map page:

<http://docs.unh.edu/towns/MaineTownList.htm>

- The next link shows entries for the Sanford area

<http://docs.unh.edu/towns/SanfordMaineMapList.htm>

If you open the Berwick Quadrangle maps select the northeast segment.

If you open the Kennebunk Quadrangle maps select the northwest segment.

If I remember right, you have dial-up. THESE MAPS WILL TAKE A LONG TIME TO LOAD.