

STATE OF MAINE PUBLIC UTILITIES COMMISSION

DOCKET NO. 2008-255

**CENTRAL MAINE POWER COMPANY
Request for Certificate of Public Convenience
and Necessity for the Maine Power Reliability Program
Consisting of the Construction of Approximately
350 miles of 345 kV and 115 kV Transmission Lines (“MPRP”)**



Central Maine Power
Your Electricity Delivery Company

VOLUME II

REBUTTAL TESTIMONY

Of

MARY R. SMITH

AND

WILLIAM J. ALLARD

**PROJECT MANAGEMENT
MAINE POWER RELIABILITY PROGRAM**

December 4, 2009

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**REBUTTAL TESTIMONY OF
WILLIAM J. ALLARD
AND
MARY R. SMITH**

**Project Management
Docket No. 2008-255**

1 This rebuttal testimony is offered by William (Bill) Allard, Program Manager at Burns &
2 McDonnell, and Mary Smith, Project Manager at Central Maine Power Company (CMP). Please
3 *see* Exhibit M, pages 5-6 of 61 of the Certificate of Public Convenience and Necessity (CPCN)
4 filing dated July 1, 2008 for Mary Smith’s credentials. Bill Allard’s credentials are provided
5 with this testimony as Exhibit 1.

6 *The purpose of this rebuttal testimony is to demonstrate that the MPRP project is “shovel*
7 *ready,” with a competent and experienced project management team in place, and that the Staff’s*
8 *scenarios would involve substantial delays and additional costs not considered in their analysis.*
9 For MPRP, significant progress has been made on all necessary design, real estate and permitting
10 work, and MPRP as proposed by CMP is ready to commence construction in 2010 upon the
11 issuance of a CPCN. In contrast, implementation of either of Staff’s proposed alternative
12 transmission “scenarios” would involve substantial delays and additional costs for Maine
13 customers.

14 Staff concedes that there is a “current” need for significant transmission investments in
15 Maine to address reliability issues. (*See* Bench Analysis (BA) at 3-6.) Upon the issuance of a
16 CPCN, MPRP is ready to commence construction to address that need. The costs of MPRP have
17 been thoroughly estimated; the construction sequence and schedule has been developed and,
18 under that schedule, MPRP can be fully energized by mid-2015. Compared to MPRP,
19 implementation of Staff scenarios would cause both delay (because Staff scenarios require time

1 to address necessary design, environmental and real estate issues raised by the alternative routes
2 proposed by Staff) and lost efficiencies (because MPRP is an integrated project, while Staff
3 scenarios are not). Both the delay and lost efficiencies will increase the costs of the Staff
4 scenarios. Staff's estimate of the costs associated with building its scenarios, based on the
5 component cost information provided for the MPRP (CMP-08-102) by CMP, does not take into
6 account these additional costs, including from scope not included in MPRP.

7 **I. MPRP is "Shovel Ready"**

8 Building a project as extensive and interrelated as MPRP requires significant lead times
9 prior to construction in order to resolve permitting, real estate, environmental and construction
10 sequencing issues. For MPRP, these issues have been, or will soon be, resolved to a sufficient
11 degree to allow construction of MPRP to begin promptly upon the issuance of a CPCN. If the
12 CPCN for MPRP is awarded in early 2010, CMP would be able to begin construction during the
13 summer of 2010, and CMP has developed a schedule that will allow the full project to be
14 energized and providing reliability to Maine's customers in 2015. A high-level summary of this
15 schedule is attached as Exhibit 2. As described in this testimony, the Staff scenarios would
16 create substantial new issues, the resolution of which would introduce significant delays – and
17 additional costs – into the construction process.

18 In 2008, CMP issued a Request for Proposal for MPRP program management services.
19 Through a competitive bidding process, CMP selected Burns & McDonnell. Burns &
20 McDonnell has successfully served as program manager on large power delivery, power
21 generation, industrial and aviation facility projects around the world. Within the past five years,
22 Burns & McDonnell has successfully executed the design and management of power delivery
23 (transmission) projects totaling \$2.8 billion, including projects in New England.

1 Burns & McDonnell has a thorough understanding of the design and construction
2 requirements of the MPRP. They have the knowledge required to create a strong execution plan,
3 project controls and a culture of safety, along with the experience required to execute these
4 programs. The Burns & McDonnell Program Management Team began providing program
5 management services with an agreement effective January 23, 2009 and is now working with
6 CMP as an integrated MPRP Team. The MPRP Team continues to draw on the local expertise
7 of many Maine-based contractors such as RLC Engineering, Power Engineers, TRC, DeWan
8 & Associates and Bernstein Shur Government Solutions. Together with these contractors, the
9 MPRP Team has the resources in place to commence construction without delay.

10 **II. Staff Scenarios Would Involve Substantial Delays and Additional Costs**

11 Implementation of either of the Staff scenarios would involve substantial delays due to
12 design requirements described in the Rebuttal Testimony of Steve Walker (Design Rebuttal) and
13 the real estate and environmental requirements discussed below. While Staff has not evaluated
14 these requirements, the costs and the delays required to address them are substantial.

15 **A. Real Estate Delays and Costs Associated with the Bench Analysis Scenarios**

16 Transmission line projects, even those constructed within existing corridors, face a host
17 of real estate challenges. Acquisition negotiations, eminent domain restrictions, survey work and
18 landowner relations all pose challenges. While the real estate needs of MPRP have been fully
19 researched and the required negotiations are substantially complete, the Staff has done no
20 analysis of the real estate requirements for its scenarios. As discussed in more detail below,
21 where Staff includes scope not incorporated in MPRP, particularly from Maxcys substation to
22 Mason substation, substantial delays and costs would be required to evaluate and resolve the real
23 estate constraints.

1 **i. Real Estate Constraints Involved in the Staff Scenarios**

2 Where the scope of the Staff scenarios differs from that proposed in the MPRP (at
3 Buxton and Mason substations and the transmission line between Maxcys and Mason), real
4 estate constraints have not been analyzed by Staff. (CMP-08-111.) In CMP's experience, the
5 complete analysis of real estate constraints will take considerable time, and complex real estate
6 issues often arise.

7 **a. Real Estate Risks Associated with Substations**

8 As discussed in the Design Rebuttal, the Buxton substation will need to be expanded to
9 accommodate the additional 345 kV line included in the Staff scenarios. This expansion may
10 *require the acquisition of additional real estate, for which no analysis has been done. Based on*
11 *CMP's experience with the MPRP and other projects, real estate transactions occasionally can be*
12 *completed in a month, but can take as long as two years to complete. Even if the real estate*
13 *required at Buxton is available to construct the Staff scenarios (and that has not been*
14 *determined), the process of obtaining any necessary parcels could easily take more than a year*
15 *from the time negotiations begin.*

16 More critically, the real estate issues associated with the expansion of the Mason
17 substation in the Staff scenarios could present serious acquisition obstacles, in addition to the
18 permitting challenges described in this testimony below. The existing Mason station switchyard
19 is located on a peninsula adjacent to the former oil-fired Mason station and a new residential area
20 is under development called Point East. Attached as Exhibit 3 is the Master Plan for the Point
21 East development, available at www.pointeastmaine.com/masterplan.html. The Staff scenarios
22 would place a new substation to the west of the existing one. Proposed transmission lines would
23 enter the new substation from the north. As a result, all land parcels located to the west of

1 existing CMP land (lots 1 through 66) would be directly impacted by the expansion proposed by
2 the Staff scenarios.

3 The Town of Wiscasset lists the total assessed land and building value for lots 1 through
4 66 as \$8,790,000; this is the minimum additional real estate cost for the expansion. The
5 acquisition costs may not even be the most difficult real estate issue related to an expansion at
6 Mason substation. Real estate risks include not being able to acquire property within 300 feet of
7 inhabited dwellings due to the limitations imposed by Maine's eminent domain statute¹. *See*
8 35-A M.R.S. § 3136.1. In the event this limitation applies, the developer might sell the
9 66 parcels to CMP only if CMP agreed to purchase all of the developer's interests in the
10 peninsula, which include another 17 lots plus CMP's former power generation building. The
11 potential costs to acquire all of the developer's real property on the peninsula could greatly
12 exceed the minimum \$8,790,000, just for the expansion of the substation. The Town of
13 Wiscasset was supportive of the developer's plans to redevelop the peninsula to residential and
14 waterfront related commercial uses. In fact, expansion of the substation is in conflict with the
15 development plans recently approved by the Town.

16 **b. Real Estate Risks Associated with Transmission Corridors**

17 Like the vast majority of MPRP, the proposed line from Maxcys to Mason included in the
18 Staff scenarios is located in an existing corridor (though this corridor is not utilized for MPRP).
19 The advantages of using existing corridor are substantial, as CMP has pointed out in this case.
20 (*See, e.g.,* Petition at 36:19-23.) However, the use of an existing corridor does not mean all real
21 estate constraints are avoided. For example, elsewhere in MPRP, CMP discovered several gaps
22 in its existing corridors for which real estate needed to be acquired and, in one instance, such

¹ In the case of the Wiscasset site, two of the 66 lots already have homes constructed on them.

1 acquisitions were not deemed feasible given the proximity of inhabited dwellings.² Even if
2 additional width is not generally required to accommodate Staff's scenarios, until a preliminary
3 design is complete, it cannot be determined whether any additional land rights are needed. In
4 CMP's experience, even where an existing corridor has sufficient width for an additional line,
5 there is often an environmental or physical constraint somewhere on the corridor that requires a
6 real estate solution. Implementation of the Staff scenarios would require a detailed review of the
7 corridor from Maxcys to Mason to determine whether there are any gaps in CMP's ownership.
8 A final determination of any real estate requirements could not be made until preliminary design
9 is complete.

10 **B. Environmental Costs and Delays Associated with the Staff Scenarios**

11 Environmental assessment has not been completed for the scope included in the Staff
12 scenarios that is not included in the MPRP: substantial changes to two existing substations,
13 construction of approximately 30 new corridor miles of 345 kV transmission line, Maxcys to
14 Mason and South Gorham to Buxton, and 45 new corridor miles for 115 kV transmission line
15 rebuilds, all of which includes seven new towns from which CMP would need to obtain local
16 permits. With MPRP, CMP has already conducted the full range of environmental studies and
17 surveys for MPRP scope, completed applications for various permits, submitted a comprehensive
18 environmental impact compensation package, conducted substantial work on the mitigation
19 package, and made substantial progress in the local permitting required by the towns containing
20 MPRP scope. The Staff scenarios, on the other hand, include significant scope where these

² For these locations, engineering solutions, with the associated additional cost, will be implemented.

1 studies and surveys have yet to be conducted and permitting has not begun.³ The costs and delay
 2 associated with the required environmental review and permitting are substantial and are
 3 described in more detail below.

4 **i. Additional Environmental Studies Required for Staff Scenarios**

5 The environmental studies and surveys that are necessary to document the project
 6 impacts form the basis upon which the project is permitted by the Maine Department of
 7 Environmental Protection (MDEP) and the Army Corps of Engineers (ACOE). This information
 8 is also used in municipal permitting process. Table 1 below summarizes the status of the type
 9 and extent of additional environmental studies and surveys that would be required to implement
 10 the Staff scenarios, and the anticipated time frames needed to conduct them.

11 **Table 1**

Environmental Study/Survey Type	Staff Scenario Scope Requiring Study/Survey	Study/Survey Period
Wetlands	18 corridor miles	spring – early summer 2010
Vernal Pools	30 corridor miles	early spring 2011
Rare, Threatened and Endangered Species	16 corridor miles	summer 2010
Visual	75 corridor miles; 2 substations	spring - summer 2010
Noise	2 substations	summer 2010
Stormwater Plans	2 substations	summer 2010
Pre-historic Archaeology	75 corridor miles; 2 substations	spring – early summer 2010
Historic Archaeology	75 corridor miles; 2 substations	spring – early summer 2010
Historic Architecture	75 corridor miles; 2 substations	spring – early summer 2010

12 Assuming a decision in the case in May 2010, as contemplated in the October 22, 2009
 13 Procedural Order, it would likely take at least until the end of August 2010 to complete the
 14 majority of the environmental studies and surveys. It would take significantly longer to
 15 complete the vernal pool survey. Vernal pool surveys are, by state regulation, confined to April

³ CMP here describes the delays involved in the environmental and municipal permitting processes if the Staff scenarios are implemented. CMP also notes that it is not clear what delay these scenarios would involve in the CPCN process at the MPUC itself, particularly in light of the notice requirement to affected towns (35-A M.R.S. § 3132(2)) and likely interest of new abutting landowners to intervene in the proceedings. (See Me. PUC 65 407 CMR 110 §§ 720-722.)

1 and early May because this is the breeding period for the amphibian species of particular
2 concern. Given the assumption of a mid-May decision date, the vernal pool surveys could not be
3 conducted until the spring of 2011.

4 Several additional potential delays are not captured in Table 1. For instance, if the
5 decision date is significantly delayed, other seasonal studies and surveys could be delayed. The
6 rare, threatened and endangered species surveys must be conducted in June through October; the
7 field components of the pre-historic archaeology, and to a lesser degree, the historic archaeology
8 surveys, are typically confined to the snow-free months. In addition, the noise, stormwater and
9 visual studies can be conducted only when project design, including both the transmission line
10 and substation designs, is complete. Any required design time would be in addition to the time
11 estimates contained in Table 1.

12 **ii. New MDEP and ACOE Applications Would be Required for Staff**
13 **Scenarios**

14 *When combined with the necessary MDEP and ACOE permitting process, the delays*
15 *caused by the required environmental survey and study work would become even more*
16 *substantial. CMP's MPRP applications to the MDEP and ACOE were submitted June 12, 2009.*
17 *Currently, both application reviews are well underway with permit approvals anticipated as early*
18 *as December 2009.⁴ Given the magnitude of the changes in the Staff scenarios, there is a high*
19 *likelihood that the MDEP and ACOE will require totally new application submittals and*
20 *presumably a re-start of the application review time-frame.*

21 In order to procure permits from the MDEP and ACOE, an applicant must demonstrate to
22 the satisfaction of the permitting agencies that it has avoided and minimized the impacts to the
23 criteria resources to the greatest extent practicable. To meet this permitting test, the information

⁴ Once the MDEP has determined an application to be complete, it has 185 days to review the application and come to a decision. The ACOE has no designated timeframe for review of an application.

1 obtained from the environmental surveys is utilized as an integral part of the transmission line
2 and substation design processes. Structure placement, access road location, corridor clearing
3 impacts and visual and noise impacts are some of the considerations that are part of the iterative
4 process that goes on between the transmission line and substation designers and environmental
5 personnel to prepare the permit applications. While the time required is highly variable, the
6 environmental portions of this iterative process can be expected to take roughly three to six
7 months.

8 **iii. Environmental Constraints Related to Substations Added In Staff**
9 **Scenarios**

10 The Staff scenarios incorporate changes to two substations that are not components of
11 CMP's MPRP: Mason and Buxton substations. These substation scope changes feature a
12 number of environmental constraints not analyzed by the Staff. (CMP-08-112.) As described
13 below, these constraints will add cost and delay to the implementation of the Staff scenarios as
14 compared to MPRP, and, in the case of proposed scope at Mason substation, they may even
15 render the Staff scenarios unfeasible.

16 The Staff scenarios propose to have an additional 345 kV transmission line terminate at
17 the Mason substation, which is located within a tidal shoreland zone. Expansion of the
18 substation to accommodate the new line in this highly sensitive zone could be environmentally
19 problematic, including issues concerning development setbacks and proximity to tidal waterfowl
20 and wading bird habitat, as well as a documented bald eagle nest. The zoning and environmental
21 constraints faced at the Mason site may also include Resource Protection Zone limitations on
22 industrial development.

23 The Staff scenarios also propose to have an additional 345 kV transmission line go to the
24 Buxton substation. A recent expansion of the Buxton substation yard required extensive
25 modifications to accommodate stormwater runoff. As part of the stormwater plan, areas

1 immediately adjacent to the substation were put into permanent easement to accommodate the
2 stormwater runoff. If these easements need to be altered to accommodate the Buxton substation
3 work, there could be delays and significant additional costs due to the need to obtain additional
4 real estate and revision of legal documents.

5 There are also extensive wetlands in the vicinity of the Buxton substation. The recent
6 expansion of the substation required the re-routing of a small stream. Depending on the
7 substation expansion design, this stream could be impacted again. The physical and regulatory
8 feasibility of further re-routing the stream would need to be investigated and taken into account
9 in the design of the substation. In addition, potential compensation costs of impacts to wetlands
10 and the stream would need to be taken into account.

11 **iv. Additional Local Permitting Required for Staff Scenarios**

12 In addition to the MDEP and ACOE permitting processes, the Staff scenarios would
13 result in the addition of seven new towns from which CMP would need to obtain permits: Alna,
14 Bath, Brunswick, Buxton, Falmouth, Topsham and Windham. In addition, there are several
15 towns in which the scope of the project that is being permitted will change significantly. These
16 include Bowdoinham, Durham, Whitefield, Wiscasset and Woolwich. New or revised
17 permitting would be required for each of these towns.

18 In addition to the ordinary local permitting process, which usually takes several months,
19 these new towns may require ordinance changes before permit applications are submitted. In
20 working with the numerous towns for MPRP, CMP found that many municipalities had zoning
21 or land use regulations that required ordinance changes in order to even submit an application for
22 the municipalities to consider. This has proven to be a very time consuming process, ranging
23 from a minimum of several months to almost a year and a half (and still continuing in one town).
24 Part of the reason for the lengthy time frame is that ordinance changes typically require planning

1 board, board of selectmen, and ultimately town meeting approvals for implementation. Even in
2 the most amenable municipalities, ordinance changes can take many months due to the
3 infrequency of town meetings, (annual or special) at which the necessary votes can occur.

4 In summary, Staff scenarios would require extensive new environmental studies and
5 surveys. The time required to conduct these studies is significant, and it is made more so by the
6 fact that some of the surveys are season dependent. In addition, Staff scenarios add two
7 substations to the scope of MPRP. There are existing site conditions at these substations that
8 would severely constrain the design and permitability of this substation work. Even if the Staff
9 scenarios are permissible, a determination by the MDEP or ACOE that the MPRP applications
10 must be resubmitted due to the extensive scope change would significantly delay the
11 construction of MPRP. Finally, the additional need to acquire permits from seven new
12 municipalities could also cause significant delay in the implementation.

13 **III. Cost of Delay**

14 There are several current conditions and trends the Staff did not consider which
15 ultimately could increase the projected costs of the Staff scenarios, as delayed or implemented as
16 the Staff has suggested. To fully assess the costs of delay, an analysis of prices and market
17 conditions would be required. Short of doing a full analysis, we do know that current market
18 prices for commodities are low and the trend shows that they have begun to rise. Because MPRP
19 is construction-ready, CMP has an opportunity now to take advantage of lower material prices.
20 The delays associated with the Staff scenarios could severely limit the ability to purchase
21 materials in bulk at these lower prices.

22 If MPRP construction begins in 2010, it will likely be ahead of some major regional
23 programs in the northeast that could compete for resources. These four major programs (two
24 NEEWS projects (Northeast Utilities and National Grid), PPL Susquehanna to Roseland, and

1 PSE&G Susquehanna to Roseland), combined with other programs around the country, will
2 increase competition for materials and labor and will likely contribute to increased materials
3 pricing – as well as increased lead times and labor costs. The current unprecedented level of
4 “base load” work in the industry strengthens our belief that increases in labor and material
5 pricing may be on the horizon. These facts combined suggest that material and labor markets
6 will tighten, and that current short lead times for materials will increase as competition for those
7 materials increases, and these facts have not been taken into consideration in the Staff’s
8 scenarios.

9 In addition to the costs of delay noted above, the phased implementation proposed in the
10 Staff scenarios involves substantial additional costs. First, phased construction limits the ability
11 to concentrate work around outages. Currently, MPRP construction will require an estimated
12 300 outages, and phased construction would require substantially more. Finally, phased
13 construction has substantial adverse portfolio effects. In other words, the aggregate risk is lower
14 on a large project than the sum of the individual project risks. Therefore smaller, less diverse
15 projects will produce increased risk costs, including higher rates on insurance.

PROJECT MANAGEMENT REBUTTAL EXHIBIT 1

William J Allard



Education

MBA, College of St. Joseph, 2008

B.A. Organizational Leadership,
College of St. Joseph, 2004

ASEE, Vermont Technical
College, 1982

Total Years of Experience

25+

Years With Burns & McDonnell

4

Start Date

2005

Mr. Allard has 20 years of experience in the Electric Transmission industry as a Project Manager, Construction Manager and Maintenance Manager. Through his 16 years inside the Electrical Transmission company, he developed an excellent understanding of the Transmission Industry and the operations constraints of the New England Power Grid. He worked with various system operation centers, VELCO, CONVEX, ISONE to plan and execute outages. His "hands on" experience includes working in and around high voltage substations, transmission lines and High Voltage Direct Current (HVDC) stations. He has technical expertise in power systems to include system operations, protection and control systems and high voltage AC and DC equipment. He also has expertise in testing and commissioning substations, substation equipment and transmission lines and expertise in dynamic power and VAR devices, STATCOMS and HVDC. He has achieved consistent and measurable results in the management of high voltage electrical construction projects in a safe and efficient manner.

A brief summary of his experience follows.

Burns and McDonnell

Maine Power Reliability Program

Maine

Mr. Allard currently serves as Program Manager for the Maine Power Reliability Program. He provides leadership and directs the project personnel. He is responsible for the full scope of project efforts including: staffing the program management team, guiding the team through the development of policies and project strategies, completion of the project execution plan and managing the construction. He is well versed in transmission systems operations, community relations, safety management, procurement activities, environmental compliance, real estate acquisitions, construction management, project controls, and engineering practices.

Burns and McDonnell

Middletown | Norwalk Transmission Line and Substation Project

Southwestern Connecticut

Mr. Allard served as Construction Manager and was responsible for the management of all three aspects of the \$1.1 billion Middletown | Norwalk Project: substation, overhead transmission line and underground transmission line. He coordinated all field work with the contractors, the owner and Burns & McDonnell personnel. He ensured that Burns & McDonnell superintendents and inspectors were appropriately managing the critical construction activities. He worked with the outage and commissioning team to plan and execute outages and commissioning. He worked with the project managers and support staff to ensure the program was on track for an early completion and under budget. He also served as operations manager for the Wallingford CT Projects Office. His responsibilities included staffing for three major projects that were run out of the Connecticut office.

Vermont Electric Power Company

Rutland, VT

Served as Construction/Project Manager and HVDC/FACTS Engineer

- Construction Manager and Project Engineer for the construction of the \$6 million Essex STATCOM project. Responsible for the project from inception through electrical commission and startup.
- Project Manager for the \$1.5 million NLP St. Albans switching station project,

William J Allard



- constructed and commissioned on time and on budget.
- Project Manager for the \$8 million NLP Highgate Substation project, on budget and on schedule through completion.
- Project Manager for the Irasburg to Morshers Tap 115kV/34.5kV dual circuit transmission line.
- Project Manager for the removal, redesign and reinstallation of three 260MVA HVDC Transformers
- Project Manager for the installation of a CO2 fire suppression system in the HVDC Valve Hall
- As Project manager, managed all aspects of the design and construction of the projects: civil, electrical and electrical system operations. Managed contractors, consultants and VELCO team members. Generated the RFP's, negotiated the contracts, and hired the contractors and consultants. Managed risk and ensured contract compliance by all contractors and consultants. Drafted, monitored and reported on budgets. Provided engineering and technical support. Ensured the *reliable, safe and efficient operation of the facilities and transmission system* by working with the system operators to define outages and manage risks. Performed switching and held clearances for the outages.
- Managed the Highgate Converter Station, an ABB back to Back HVDC converter station, which consistently performed above the industry standard for reliability. Project and construction manager for several small projects.
- Devised the long-term strategy for the operation and maintenance of the Highgate Converter, prepared and presented O&M and Capital Budgets, provided financial management, and managed the day-to-day activities and personnel.
- Managed the Essex FACTS, a Mitsubishi Statcom, which had a performance record at the top of the industry since its first full year of operation.
- Designed and implemented engineering improvements to process control, protection systems and control systems.
- Worked in live substations with the technicians installing, troubleshooting, and maintaining the various systems.
- Switchman and clearance holder
- Member of the Safety Advisory Committee for 10 years

Served as HVDC Converter Coordinator:

- Managed the Highgate Converter facility and associated projects.
- Created the reliability centered maintenance program utilizing an automated maintenance scheduling system and spare parts inventory.
- Designed and implemented engineering improvements while maintaining and implementing changes to the plant documents and records.
- Compiled the list of maintenance projects, scheduled and managed the annual inspection outage and assured that the routine maintenance was performed and recorded.
- Assisted in the preparation of the annual O&M and capital budgets.
- Hired and supervised contractors and managed construction projects.
- Worked as a hands-on technician in live substations.
- Switchman and clearance holder.

PROJECT MANAGEMENT REBUTTAL EXHIBIT 2

Maine Power Reliability Program

High Level Executive Summary

Activity Name	Original Start	Finish	2009				2010				2011				2012				2013				2014				2015	
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Maine Power Reliability Program																												
PROJECT INITIATION																												
Project Initiation Summary	2128	25-Oct-06 A	[Gantt bars for 2009-2015]																									
SOURCING																												
Substation And Transmission Line Sourcing	1609	01-Oct-08 A	[Gantt bars for 2009-2015]																									
CONSTRUCTION																												
MDEP & ACOE Permits Received	0	31-Dec-09	[Gantt bars for 2009-2015]																									
MPUC Permit Received	0		[Gantt bars for 2009-2015]																									
Project End	0	17-Feb-15*	[Gantt bars for 2009-2015]																									
NORTHERN LOOP																												
Substations																												
Albion Substation	617	08-Jul-10	[Gantt bars for 2009-2015]																									
Orrington Substation	375	15-Jun-12	[Gantt bars for 2009-2015]																									
Cooper's Mill Substation	341	27-Jun-12	[Gantt bars for 2009-2015]																									
Winslow S/S	100	03-Jul-12	[Gantt bars for 2009-2015]																									
Belfast Substation	65	31-Dec-13	[Gantt bars for 2009-2015]																									
Demolish Maxcy's S/S	180	11-Feb-14*	[Gantt bars for 2009-2015]																									
Transmission Lines																												
ROW Clearing	753	09-Jul-10	[Gantt bars for 2009-2015]																									
Northern Loop Transmission Line Construction	1085	15-Dec-10	[Gantt bars for 2009-2015]																									
CENTRAL LOOP																												
Substations																												
Lewiston Lower S/S (by others)	180	01-Nov-10*	[Gantt bars for 2009-2015]																									
Middle St S/S (by others)	180	01-Nov-10*	[Gantt bars for 2009-2015]																									
Monmouth Substation	170	19-Jul-11	[Gantt bars for 2009-2015]																									
Larrabee Road Substation	335	12-Aug-11	[Gantt bars for 2009-2015]																									
Livermore Substation	170	18-Apr-12	[Gantt bars for 2009-2015]																									
Demolish Brown's Crossing S/S	150	17-Jul-12	[Gantt bars for 2009-2015]																									
Demolish Gulf Island S/S	78	09-Aug-12	[Gantt bars for 2009-2015]																									
Highland Substation	55	11-Mar-14	[Gantt bars for 2009-2015]																									
Maine Yankee Substation	190	20-May-14	[Gantt bars for 2009-2015]																									
Transmission Lines																												
ROW Clearing	726	09-Jul-10	[Gantt bars for 2009-2015]																									
Central Loop Transmission Line Construction	1277	15-Dec-10	[Gantt bars for 2009-2015]																									
SOUTHERN LOOP/SOUTHERN CONNECTOR																												
Substations																												
So Gorham S/S (by others)	360	26-May-09 A	[Gantt bars for 2009-2015]																									
Raven Farm Substation	278	07-Feb-11	[Gantt bars for 2009-2015]																									
Surowiec Substation	240	10-Jan-12	[Gantt bars for 2009-2015]																									
Three Rivers S/S (by others)	360	06-Sep-12	[Gantt bars for 2009-2015]																									
Maguire Road Substation	205	25-Apr-13	[Gantt bars for 2009-2015]																									
Spring Street Substation	126	18-Aug-14	[Gantt bars for 2009-2015]																									
Transmission Lines																												
ROW Clearing	434	09-Jul-10	[Gantt bars for 2009-2015]																									
Southern Transmission Line Construction	1012	15-Dec-10	[Gantt bars for 2009-2015]																									

PROJECT MANAGEMENT REBUTTAL EXHIBIT 3




POINT EAST
A LAND TRUST DEVELOPMENT - WISCASSET, MAINE

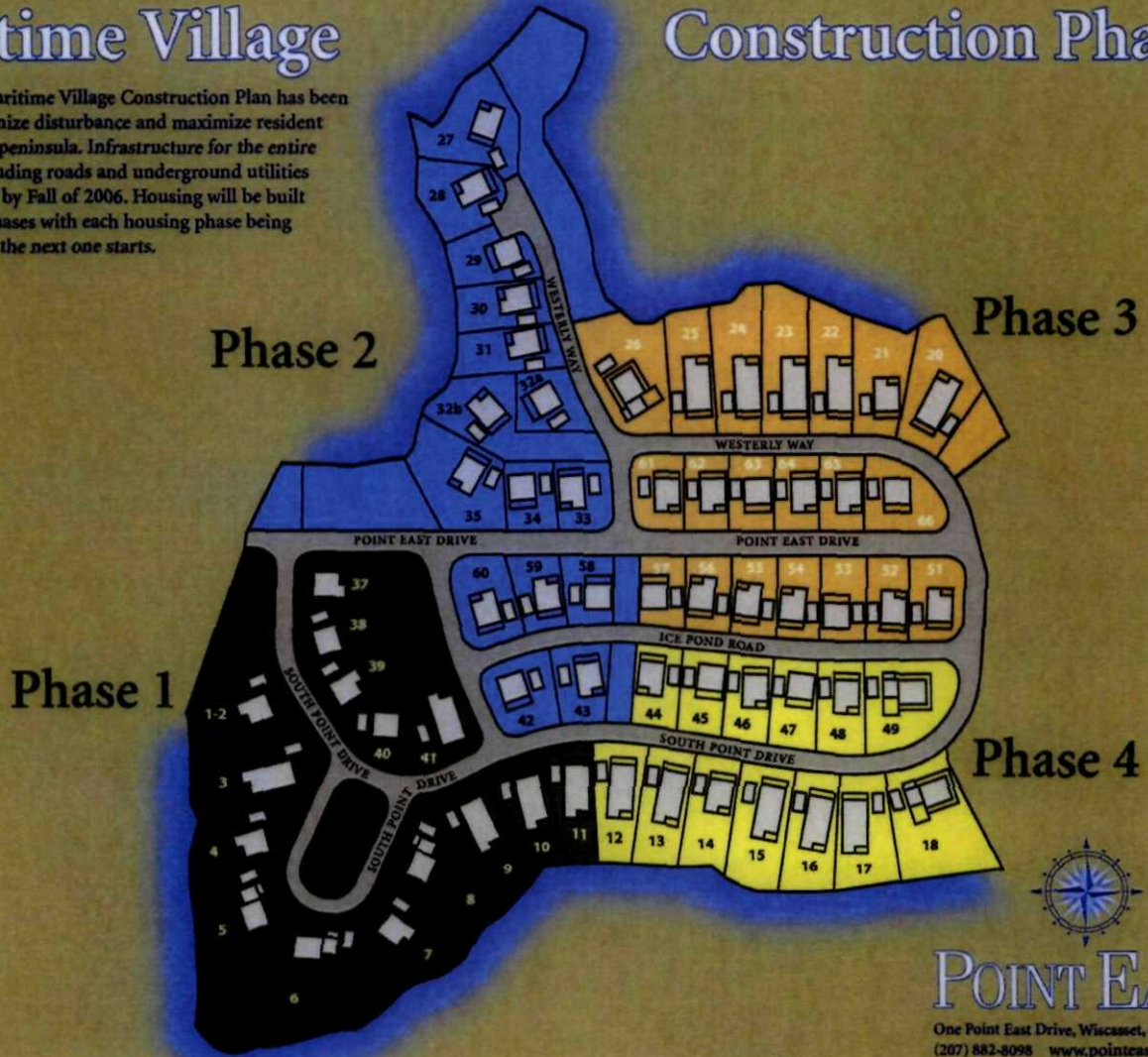
Maritime Village

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Maritime Village

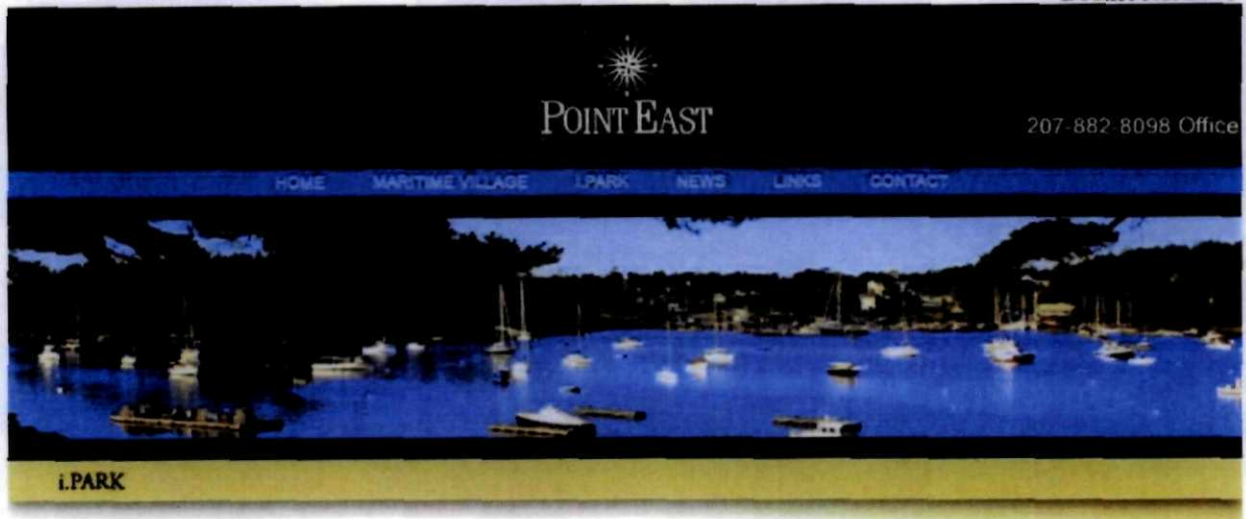
The Point East Maritime Village Construction Plan has been designed to minimize disturbance and maximize resident enjoyment of the peninsula. Infrastructure for the entire development including roads and underground utilities will be completed by Fall of 2006. Housing will be built in four distinct phases with each housing phase being completed before the next one starts.

Construction Phases

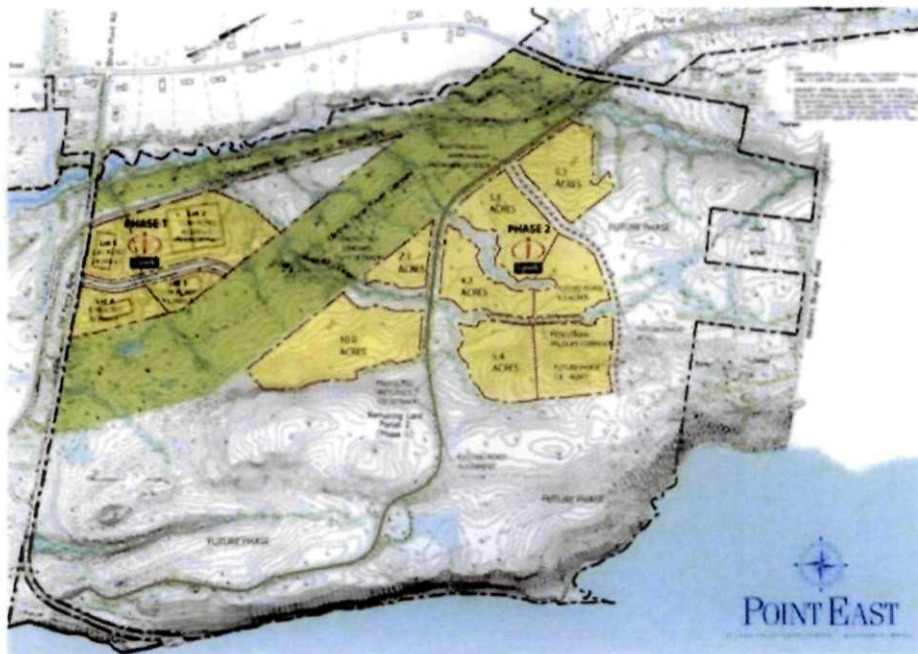


POINT EAST

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i.Park Master Site Plan



Our newest nationally branded i.Park high tech business/manufacturing campus featuring:

431 acres with road, rail and deep waterfront access

City water, sewer, 3-Phase power and high speed internet Business enterprise zone

Fully approved lots for purchase, lease, build-to-suit

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