

EXHIBIT 14

MOVE TO STRIKE HIGHLIGHTED
TESTIMONY BELOW AND
EXHIBIT DELNG-2-B, ATTACHED

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF

CALAIS LNG PROJECT COMPANY LLC)
LNG Receiving, Storage and Vaporization Terminal, Calais, Maine)
Send-Out Pipeline, Calais, Baileyville, Baring, and Princeton, Maine)
)
Air Emissions Application #A-1029-71-A-N,)
Site Location of Development Application #L-24843-26-A-N,)
Natural Resources Protection Act Applications #L-24843-TG-B-N,)
#L-24843-IW-C-N, #L-24843-L6-D-N, #L-24843-4P-E-N)
Waste Discharge Application #W-9056-5O-A-N)

Exhibit DELNG-2

**PRE-FILED DIRECT TESTIMONY AND EXHIBITS OF
TERRENCE J. DEWAN**

regarding

- **Visual impacts from the development and operation of the proposed Calais LNG Terminal**

June 1, 2010

QUALIFICATIONS OF WITNESS

My name is Terrence DeWan. I am self-employed as a landscape architect with Terrence J. DeWan & Associates in Yarmouth, Maine. I received a Bachelors of Landscape Architecture (BLA) degree in 1968 from the State University of New York College of Environmental Sciences and Forestry in Syracuse, New York. I am licensed by the Maine State Board of Licensure for Architects, Landscape Architects, and Interior Designers (license #6).

I have been involved in visual impact assessments (VIA's) in Maine since the mid-1970's. My firm and I have worked on over five dozen VIA's throughout Maine and New

England for a wide variety of projects, including port facilities, electrical power generation facilities, transmission lines, gas storage facilities, industrial buildings, sanitary landfills, wind energy facilities, hydroelectric projects, and new community development. I served as a consultant to the Maine Department of Environmental Protection (DEP) in the development of Scenic Impact Rules and also served on a DEP Task Force for the development of Chapter 315 (Assessing and Mitigating Impacts to Existing Scenic and Aesthetic Uses). I am the author of the *Scenic Assessment Handbook* for the Maine State Planning Office Maine Coastal Program.

Attached hereto as Exhibit DELNG-2-A is my CV, which provides additional information about my background and experience in landscape architecture and visual impact assessment.

PURPOSE AND SCOPE OF TESTIMONY

The purpose of my testimony is to evaluate the visual impact of the Calais LNG facility on scenic resources in close proximity to the site on the St. Croix River, primarily the St. Croix Island International Historic Site.

SUMMARY OF TESTIMONY

I reviewed the Visual Impact Assessment (VIA) of the proposed Calais LNG facility prepared by Woodard & Curran for the Calais LNG Project. I examined the potential visual impacts of the facility on the St. Croix Island International Historic Site in terms of potential contrasts to color, form, line, texture, scale, and dominance. Based upon my review of the VIA and my knowledge of the site, I believe that the construction and operation of the Calais LNG facility as proposed would result in an unreasonable interference with existing scenic and

aesthetic uses, and that it would unreasonably adversely affect scenic character.

ANALYSIS

ST. CROIX ISLAND INTERNATIONAL HISTORIC SITE

St. Croix Island International Historic Site is a unit of the National Park Service and, as such, is considered a 'National Park' for purposes of evaluating the potential impacts of the Calais LNG facility under Chapter 315 of the DEP rules. St. Croix Island was authorized as a National Monument in 1949, dedicated in 1968, and redesignated an International Historic Site in 1984. A memorandum of understanding between Canada and the United States recognizes the international significance of the site and commits both nations to joint planning and commemoration.

The VIA points out that "the NPS does not encourage visitation to the island in order to minimize potential disturbance of its historic and archaeological resources and due to the island's ecological sensitivity to any significant amount of visitor foot traffic." According to the VIA, informal visitor use to the island in 1998 was estimated to be 1,200 to 1,500 annually, primarily by people in small boats and kayaks. A boat launch is provided at the mainland facility in the park; however, there are no specific boat landing facilities on the island.

In addition to St. Croix Island and the visitor use area on the mainland, the authorized park boundary of St. Croix Island International Historic Park includes a private property on the mainland, east of the Glashan-Nickerson House, *i.e.*, the Pettegrove-Livingstone House, which is also in the National Register of Historic Places. While there are no funds in place to acquire this

historic property at the present time, its future acquisition has been authorized. The Park Service would like to purchase it and relocate the interpretive exhibits that are currently in Red Cove to this more prominent location. See Facilities Development Plan for the location of the authorized park boundary and the Pettegrove-Livingstone House, pages 8-10, <http://www.nps.gov/sacr/parkmgmt/planning.htm>.

TJD&A prepared a photosimulation of the view from the Pettegrove-Livingstone property (within the authorized boundary of the National Park). It illustrates that the Calais LNG storage tanks, the pier, and the docked LNG tankers would be prominently visible from this waterfront location within the park boundary. The presence of the Calais LNG facility 1.5 miles upstream from this viewpoint could have a severe impact on the National Park Service's and the public's ability to utilize this property. See Photosimulation from the Pettegrove-Livingstone property, Exhibit DELNG-2-B.

VISUAL IMPACT ON ST. CROIX ISLAND INTERNATIONAL HISTORIC PARK

To assist staff in administering Chapter 315, the DEP issued a Standard Operating Procedure (SOP), Guidance for Assessing Impacts to Existing Scenic and Aesthetic Uses under the Natural Resources Protection Act. Appendix B: Visual Impact Assessment Matrix (initially developed by Terrence J. DeWan & Associates) is provided to guide the evaluation of visual impacts of development proposals. See Exhibit DELNG-2-C. The matrix requires two types of evaluations: Scenic Significance and a Rating of Impact Severity.

¹ Federal Register. Tuesday, September 17, 1996. <http://www.gpo.gov/fdsys/pkg/FR-1996-09-17/html/96-23814.htm>

Scenic Significance. There is no doubt about the significance of St. Croix Island and the visual sensitivity of the surrounding area. St. Croix Island is an International Historic Site listed on the National Register of Historic Places. It is the only International Historic Site within the National Park Service system. The National Park Service's Facilities Development Plan for the site notes:

A memorandum of understanding between the United States and Canada recognizes the international significance of Saint Croix Island and commits both nations to joint planning and commemoration.²

Rating of Impact Severity. The second component of the evaluation process is a determination of the severity of the visual impact (from Weak or None to Severe). The VIA has determined that the view from St. Croix Island would result in a score of 25, which translates into a severity rating of Strong. The Visual Impact Assessment Form provided in the DEP Standard Operating Procedure notes that a 'Strong' rating results from an accumulation of 18 to 26 points. The rating score of 25 is at the very upper end of the range.

I have examined each of the criteria (noted below) for this rating and found that it is overly conservative in some areas in estimating the visual impact. In performing this analysis I looked at the views from both St. Croix Island (SLOD Figures 6-7B and 6-8B in the VIA) and the shoreline of the Pettegrove-Livingstone property, which is within the National Park boundary (Exhibit DELNG-2-B).

² National Park Service. Facilities Development Plan for Saint Croix Island International Historic Park, available at <http://www.nps.gov/sacr/parkmgmt/planning.htm>.

A. Landscape compatibility is a function of the sub-elements of color, form, line, and texture, and whether the proposed activity differs significantly from its existing surroundings. MDEP Chapter 315 Regulations.

- **Color.** The colors used on the LNG storage tanks will be a primary factor in determining their visibility in the surrounding landscape. Some colors that are often used for large storage tanks could make them highly visible from viewpoints near and far. The photosimulations provide by Calais LNG in the VIA (Figures 6-7B and 6-8B) show the tanks with a silver color, which would have a moderate to strong degree of color contrast with the wooded backdrop of Devil's Head and the surrounding green woodland. The VIA assigned a rating of 2 (moderate degree of contrast) to the evaluation of color, which is a proper score.
- **Form.** From both St. Croix Island and the mainland (Pettegrove-Livingstone property) looking toward Devil's Head, the cylindrical forms of the storage tanks and the linear form of the pier will be recognizable as industrial elements in a landscape that is lacking in similar forms. The VIA assigned a rating of 3 (severe contrast) to the evaluation of form, which is appropriate.
- **Line.** When viewed from both locations, the profile of the LNG tanks seen against the dramatic promontory of Devil's Head will create a highly noticeable contrast in line. Likewise, the pier, extending approximately 1,000 feet into the St. Croix River, will be a

highly visible new line on the horizon. The VIA assigned a rating of 2 (moderate degree of contrast) to the evaluation of line, which is a proper score.

- **Texture.** Contrasts in texture are most apparent in the foreground and part of the midground viewing distances. At a viewing distance of 1.5± miles, the smooth surfaces of the tanks will present a high level of contrast with the texture of the surrounding forest and shoreline. The VIA assigned a rating of 2 (moderate degree of contrast) to the evaluation of texture. In my opinion the amount of surface area that would be visible and the degree of textural dissimilarity with the surrounding vegetation and rocky shoreline would warrant a rating of 3 (severe contrast).

- B. Scale contrast, which is determined by the size and scope of the proposed activity given its specific location within the viewshed of a scenic resource.*

From St. Croix Island and the Pettegrove-Livingstone property, the proposed LNG storage tanks, the pier, and the occasional LNG tanker will be viewed as the largest man-made objects in the northwesterly viewshed, many orders of magnitude greater than the occasional residential structures that dot the American shoreline. Devil's Head is perceived as the largest, most prominent landform in the northwestern viewshed of St. Croix Island. The top of the Head is 340' above sea level. The top of the LNG tanks would be 230' above sea level, at a level approximately 2/3's the height of Devil's Head.

The VIA assigned a rating of 8 (moderate contrast in scale), which indicates that the facility would be seen as one of several major scales or major objects in a confined setting. In my opinion, this is an appropriate rating.

- C. *Spatial dominance, which is the degree to which an activity dominates or is prominent in the whole landscape composition; or is prominently situated within the landscape; or dominates landform, water, or sky backdrop as viewed from a scenic resource.*

From St. Croix Island the LNG storage tanks, the pier, and the LNG tankers will be highly visible features in the landscape. The VIA assigned a rating of 8 (moderate contrast in scale), which indicates that the facilities would co-dominate the landscape composition. Because the storage tanks and the pier partially obscure the view toward Devil's head, a noted focal point in the regional landscape, a slightly higher score (10) would be more appropriate.

By my tabulation (increasing the score for texture and spatial dominance), the proposed Calais LNG project would have a rating of 28, which would indicate a 'Severe' visual impact to the St. Croix Island. Even if the tanks were painted a more sympathetic color and thus reducing the color contrast from 'moderate' (an element score of 2) to 'minimal' (an element score of 1), the project would still have a cumulative score of 27, which the Visual Impact Assessment Form describes as a 'severe' visual impact.

Inserting this rating into the Visual Impact Assessment Matrix and assigning a Scenic Significance rating of High would result in an Unacceptable level of visual impact. The Matrix provides this directive to the DEP staff:

“High level of visual contrast in line, form, color, or texture between existing high quality landscape and development proposal; view of water or other significant visual resource obstructed. May be grounds for project denial.”³

DEVIL’S HEAD PARK

Devil’s Head, a 315-acre tract of land immediately north of the Calais LNG site, is the highest coastal headland in Downeast Maine. The property has over a mile of tidal waterfront and notable views of the surrounding landscape and the St. Croix River shoreline. Rather than see it used for residential development, the City of Calais, the St. Croix International Waterway Commission, and many funding partners recently purchased the property for natural resource conservation, open space preservation, low-impact dispersed recreation, scenic viewing, shore access, outdoor education, and forestry demonstration projects.⁴ Volunteers invested more than 1,000 hours in building a 1.3-mile trail to the mountain’s peak and beach.⁵

In addition to a recreational resource, Devil’s Head is a highly visible natural landmark and a focal point to people on the St. Croix River and St. Croix Island. Its sharp profile stands in contrast to the more rolling landforms that are characteristic of the surrounding landscape. As noted in the later discussion, the view of Devil’s Head, specifically from the south, would be severely compromised by the introduction of the LNG tanks immediately below its southern face.

The following information from the State Planning Office’s website addresses the significance of Devil’s Head:

³ Maine Department of Environmental Protection, Standard Operating Procedure, Guidance for Assessing Impacts to Existing Scenic and Aesthetic Resources under the Natural Resources Protection Act. July 20, 2003. Appendix B.

⁴ Land for Maine’s Future Fund Project Agreement, Department of Conservation, Bureau of Parks and Lands. Dec. 19, 2002.

The City of Calais and the St. Croix International Waterway Commission were able to conserve the highest headland in Downeast Maine, Devil's Head, with significant help from the Land for Maine's Future Program, the Maine Coastal Program, Maine Department of Conservation, Maine Outdoor Heritage Fund and others. Devil's Head, which towers 340 vertical feet above the St. Croix estuary, is reached by a trail that offers exceptional views of the international coastline and St. Croix Island, the site of the first French settlement in North America (1604).

The property's 315 acres of upland, forest and marsh provide abundant opportunities for low-impact recreation, nature study and outdoor education. Visitors can enjoy more than 20 native tree species, nesting osprey, many migratory birds and a wide variety of indigenous mammals. The headland also has abundant marine life along a mile of shoreline, marked by a sandy beach and a 25-foot tidal range.⁶

Devil's Head is owned and managed by the City of Calais, under an agreement with the Maine Bureau of Parks & Lands that provides for its perpetual conservation and public use. The agreement stipulates that the land be "managed to preserve its natural values, to enhance public accessibility to the shore and to provide opportunities for dispersed, low intensity public recreation and natural history and outdoor skills education."

VISUAL IMPACT ON DEVIL'S HEAD PARK

The Maine Site Location of Development Law (Site Law) requires that a developer make "adequate provision for fitting the development harmoniously into the existing natural

⁵ St. Croix International Waterway Commission, 2003-2004 Biennial Report, available at <http://www.stcroix.org/>.

⁶ Maine State Planning Office website. http://www9.informe.org/lmf/projects/project_detail.php?project=1531.

environment and that the development will not adversely affect existing uses, scenic character, ...or other natural resources in the municipality or in neighboring municipalities.” (Emphasis added.) 38 M.R.S.A. Section 484(3). DEP’s Chapter 375 rules address two areas that must be reviewed as part of the evaluation of impacts on scenic character: 12. Preservation of Unusual Natural Areas, and 14. No Unreasonable Effect on Scenic Character.

12. Preservation of Unusual Natural Areas

A. Preamble. The Board recognizes the importance of preserving unusual natural areas for educational and scientific purposes.

B. Definition. As used in this section, "unusual natural area" means any land or water area, usually only a few acres in size, which is undeveloped and which contains natural features of unusual... scenic, or recreational significance. (Emphasis added.) (Chapter 375.12.)

As noted above, Devil’s Head is the highest coastal headland in Downeast Maine. Its significance was recognized by funding by the Land for Maine’s Future program, which helped preserve the land for the benefit of the general population. It is undeveloped land that contains both scenic and recreational resources that help define the entrance to the City of Calais. The development of Calais LNG, immediately adjacent to this prominent site, would severely detract from its intended purposes, in inserting an industrial use next to a landscape that is being preserved for its natural values and dispersed, low-intensity recreation.

The Board must determine whether a proposed development will have an adverse effect on the preservation of unusual natural areas either on or near the development site. It is very clear that the Calais LNG project will have an adverse effect on Devil’s Head:

- The project will replace a wooded landscape to the south of the property with an industrial facility.
- The LNG storage tanks will be partially visible from the Devil's Head hiking trails during leaf-on season, and will be considerably more visible in fall, winter, and early spring when leaves are not present.
- The presence of an LNG facility immediately adjacent to Devil's Head would be a negative factor in determining the future locations of interpretive exhibits, recreational facilities, and scenic overlooks.

14. No Unreasonable Effect on Scenic Character

A. Preamble. The Board considers scenic character to be one of Maine's most important assets. The Board also feels that visual surroundings strongly influence people's behavior.

B. Scope of Review. In determining whether the proposed development will have an unreasonable adverse effect on the scenic character of the surrounding area, the Board shall consider all relevant evidence to that effect, such as evidence that:

(1) The design of the proposed development takes into account the scenic character of the surrounding area.

(2) A development which is not in keeping with the surrounding scenic character will be located, designed and landscaped to minimize its visual impact to the fullest extent possible.

(3) Structures will be designed and landscaped to minimize their visual impact on the surrounding area.

(4) The plans for the proposed development provide for the preservation of existing elements of the development site which contribute to the maintenance of scenic character.

C. Submissions. Applications for approval of proposed developments shall include evidence that affirmatively demonstrates that there will be no unreasonable adverse effect on the scenic character of the surrounding area. (Chapter 375.14.)

The photosimulations (provided by both Calais LNG and TJD&A) demonstrate that the Calais LNG facility will have an unreasonable adverse effect on Devil's Head and the surrounding area. The introduction of large scale industrial forms in the immediate foreground of Devil's Head compromises the integrity of its setting and reduces its significance as a solitary natural feature. To people on the river or on St. Croix Island, Devil's Head would no longer be seen as a dramatic landform rising above the river. By virtue of the scale of the proposed facility, the impression of Devil's Head would be reduced to a large hill forming the backdrop behind the LNG tanks.

The design of the facility and the layout of the tanks do not take into account the scenic character of Devil's Head and the surrounding area. The Calais LNG facility has not been designed to minimize its impact on the surrounding area to the fullest extent possible. In my opinion, the applicant has not demonstrated that there will be no unreasonable adverse effect on the scenic character of the surrounding area.

CONCLUSION

The greatest visual impact will occur on St. Croix Island, its mainland park areas and planned expansion area, and the surrounding lands and waters of the St. Croix River, where the storage tanks, pier, and LNG carriers will be highly visible to tourists and other recreational users of the site.

Based upon my review of the VIA and my knowledge of the site, I believe that the construction and operation of the Calais LNG facility as proposed would result in an unreasonable interference with existing scenic and aesthetic uses at St. Croix International

Historic Site, a scenic resource of international significance. Furthermore, the design and layout of the Calais LNG facility has not taken into account the scenic character of Devil's Head and the surrounding area. In my opinion, the applicant has not demonstrated that there will be no unreasonable adverse effect on the scenic character of the area. From the information provided in the VIA, it is clear that it would unreasonably adversely affect scenic character.

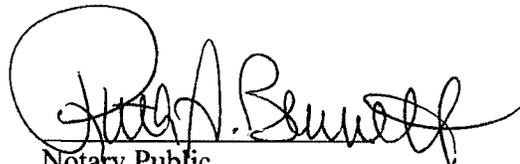

Terrence J. DeWan

Date: 6/1/10

STATE OF MAINE
COUNTY OF CUMBERLAND

Personally appeared before me the above-named Terrence J. DeWan and made oath that the foregoing is true and accurate to the best of his knowledge and belief.

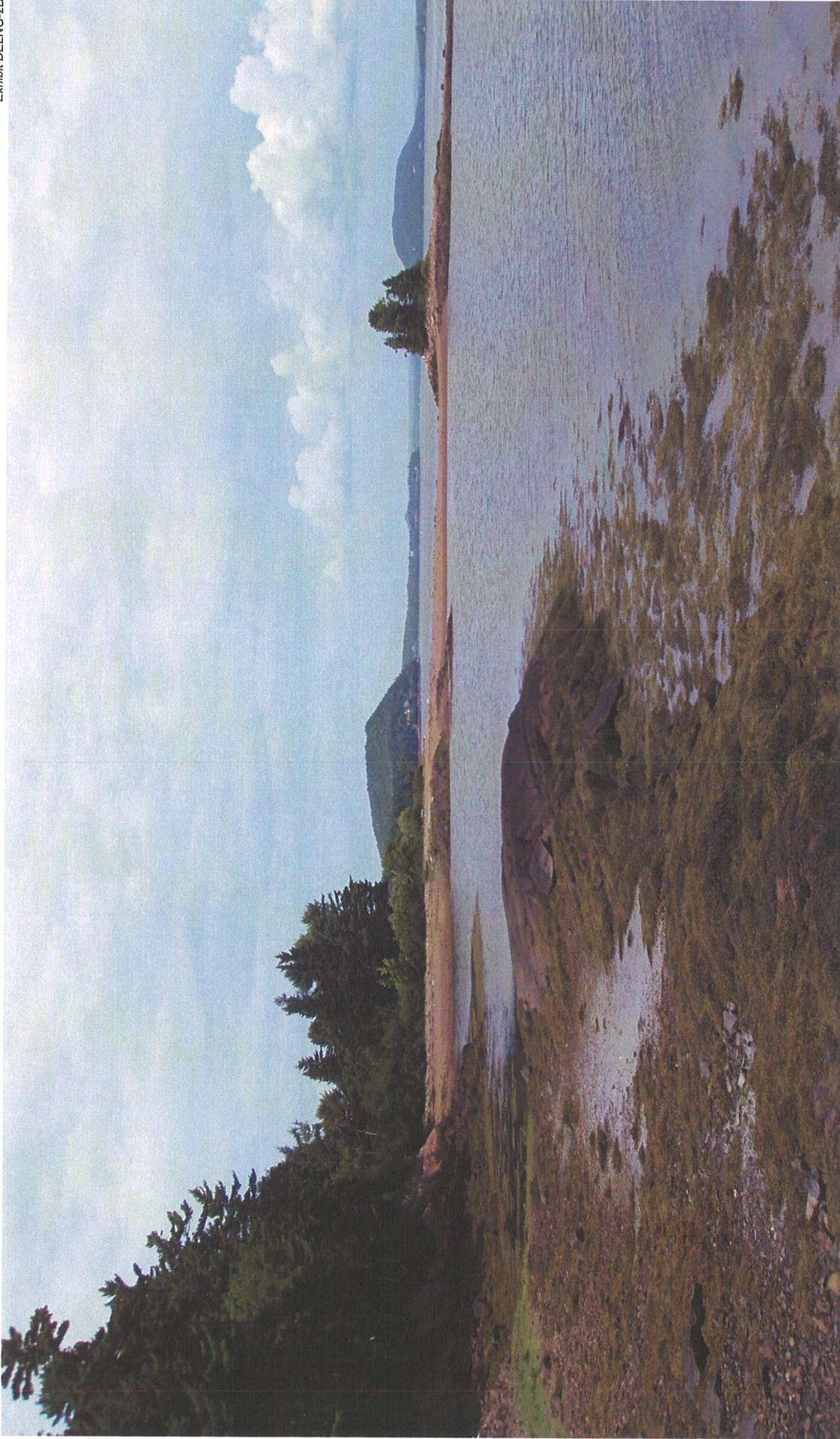
Dated: 6/1/10


Notary Public

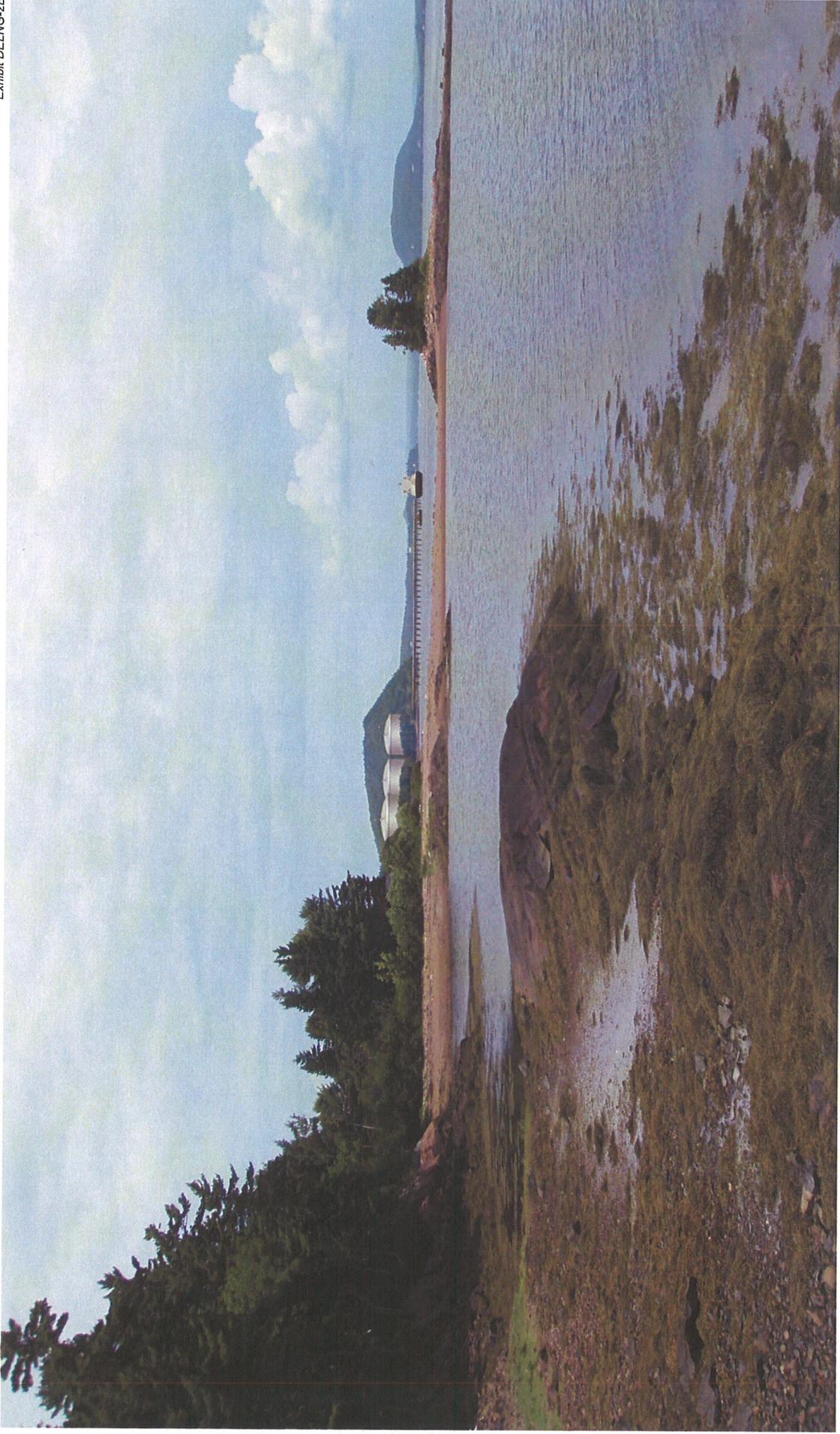
My commission expires:

RUTH A. BENNETT
Notary Public, Maine
My Commission Expires November 15, 2013

DELNG-2-B



Existing view looking northwest from shoreline of the Petegrove-Livingstone property toward Devil's Head in Calais. This viewpoint is within the authorized boundary of St. Croix Island International Historic Site. Photo from National Park Service.



Photosimulation of the proposed Calais LNG project as seen from the shoreline of the Pettegrove-Livingstone property. This viewpoint is within the authorized boundary of St. Croix Island International Historic Site.