

**Federal Energy Regulatory Commission (FERC)**

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE, Room 1-A  
Washington, D.C. 20426

***VIA E-FILING***

To: Mr. Bob Easton, Chief  
New England Branch  
Division of Hydropower Licensing

Tidewalker Associates  
Half-Moon Cove Tidal Power Barrage  
Project No. P-12704  
Preliminary Permit / Awarded on: 03.December.2010

15.January.2011

Tidewalker Associates / P-12704

In accordance with terms of a successive preliminary permit awarded to Tidewalker Associates on 03.December.2010, the following condition was placed on the permittee which is being addressed in this electronic response to FERC:

*(D) Within 45 days of the issuance date of the permit, Tidewalker Associates shall file a schedule of activities proposed by the permittee during the three-year permit term, leading to the filing of a development application. At a minimum, this shall include the dates for consulting with federal, state, and local agencies, tribes, NGOs, and other interested entities, and completing necessary studies that demonstrate progress toward filing a license application.*

In preparing the schedule, Tidewalker reviewed our application for a successive preliminary permit filed on 12.April.2010 and also reviewed work performed during the first preliminary permit awarded to Tidewalker in April 2007.

In the application for a preliminary permit, Tidewalker included the following schedule as part of our proposal to conduct a detailed feasibility study:

| FROM TIDEWALKER PRELIMINARY PERMIT APPLICATION: STUDY PHASE | QTR 1 | QTR 2 | QTR 3 | QTR 4 | QTR 5 | QTR 6 | QTR 7 | QTR 8 | QTR 9 | QTR 10 | QTR 11 | QTR 12 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| PUBLIC INTERACTION  |       |       |       |       |       |       |       |       |       |        |        |        |
| PLANNING  |       |       |       |       |       |       |       |       |       |        |        |        |
| ENVIRONMENTAL   |       |       |       |       |       |       |       |       |       |        |        |        |
| ENGINEERING   |       |       |       |       |       |       |       |       |       |        |        |        |
| ECONOMICS   |       |       |       |       |       |       |       |       |       |        |        |        |
| REGULATORY CONSULTATION                                     |       |       |       |       |       |       |       |       |       |        |        |        |
| LICENSING   |       |       |       |       |       |       |       |       |       |        |        |        |
| INFRASTRUCTURE DETAILS                                      |       |       |       |       |       |       |       |       |       |        |        |        |
| LEGEND:   |       |       |       |       |       |       |       |       |       |        |        |        |
| NON-FILED WORK  |       |       |       |       |       |       |       |       |       |        |        |        |
| FIELD WORK  |       |       |       |       |       |       |       |       |       |        |        |        |

This schedule is still in effect and has been expanded to reflect more details and to incorporate results of work completed during Tidewalker’s initial preliminary permit.

During the comment period (2009) for a Pre-Application Document (PAD) filed by Tidewalker to FERC on the Half-Moon Cove project, the following series of studies were proposed by Tidewalker to address environmental issues raised by regulators and stakeholders. The following table outlines the types of studies envisioned for the project:

| ORDER    | TYPE OF STUDY                | SUB-SETS   |
|----------|------------------------------|--|
| STEP - 1 | HYDROLOGICAL MODEL: PHYSICAL | WATER QUANTITY & FLOW / CIRCULATION / TIDE FUNCTION / PRE- & POST-BARRAGE CONDITIONS   |
| STEP - 2 | SURVEY                       | SHORELINE POLLUTION / COMMERCIAL & RECREATIONAL FISHERIES / INTERTIDAL & SUBTIDAL ZONE / LOBSTER / MAMMALS / WATERBIRD & WATERFOWL / FISH / PLANKTON / ARCHAEOLOGICAL / NATIVE PLANT |
| STEP - 3 | CHARACTERIZATION             | MODIFIED TIDAL REGIME / DESIGNATED & EXISTING USES / WILDLIFE / INTERTIDAL & SUBTIDAL HABITAT MAPPING / AQUATIC & TERRESTRIAL HABITAT MAPPING / AQUATIC / NUTRIENT / FISH PASSAGE    |
| STEP - 4 | HYDROLOGICAL MODEL: OTHER    | SHORELINE EROSION / INTERTIDAL / SUB-TIDAL / WATER QUALITY / SEDIMENTATION   |
| STEP - 5 | ASSESSMENT                   | IMPACT ASSESSMENT OF HALF-MOON COVE RESOURCES  |
| OTHER-1  | AESTHETIC                    | NOISE / VISUAL IMPACT / ARCHITECTURAL INTEGRITY  |
| OTHER-2  | ARCHAEOLOGICAL               | HISTORICAL / TRIBAL / CULTURAL / PAST PRACTICES  |
| OTHER-3  | CONSTRUCTION                 | CAUSEWAY BREACHING / ROADWAY / BARRAGE / FLOAT-IN POWERHOUSE   |
| OTHER-4  | ECONOMICS                    | BENEFIT-COST ANALYSIS  |
| OTHER-5  | PASSAGE / ACCESSIBILITY      | TURBINE IMPACTS / COMMERCIAL & RECREATIONAL BOATING / BARRAGE / FILLING & EMPTYING GATES   |
| OTHER-6  | RECREATION                   | EXISTING & FUTURE PLANS  |

The details of the proposed studies will have to be finalized after the submission of an acceptable PAD and in consultation with regulators and stakeholders. Under this scenario, the formulation of a physical model is the first step in establishing a framework for quantifying project impacts.

During the 2009 PAD review, a series of recommendations were made by various stakeholders based on an initial Tidewalker proposal which would have resulted in a 2' – 3' increase in the natural low tide level. The initial proposal did not include the placement of a filling / emptying gate on the Passamaquoddy Bay side of Half-Moon Cove. The mode of operation currently proposed by Tidewalker will have an insignificant effect on the natural tide range and will include gates in an existing causeway to ensure a minimal impact on Half-Moon Cove's tidal range and to allow the re-introduction of Passamaquoddy Bay waters into Half-Moon Cove. The causeway gate will cover the vertical distance from mid-tide to high level in order to minimize impacts on intertidal areas during the construction phase while still providing the ability to attain natural high tide levels in Half-Moon Cove.

Tidewalker assumes that the nature of the studies will be different than originally recommended in 2009 since the tidal range will not be altered in Half-Moon Cove under present plans. As a historical perspective, recommendations were made by stakeholders for studies in the following areas of environmental assessment:

| DESCRIPTION  | CODE |
|--|------|
| AESTHETIC STUDY  | AES  |
| AQUATIC RESOURCES                                      | AQU  |
| ARCHEOLOGICAL AND HISTORIC RESOURCE SURVEY             | ARC  |
| WATERBIRD AND WATERFOWL STUDY                          | BIRD |
| CONSTRUCTION RELATED IMPACTS                           | CON  |
| FISH / FISHERIES IMPACTS                               | FISH |
| GENERAL CHARACTERIZATION [OPERATIONAL & MISCELLANEOUS] | GEN  |
| HYDRODYNAMIC MODEL                                     | HYD  |
| INVERTEBRATE COMMUNITY                                 | INVT |
| MARINE MAMMAL  | MAMM |
| RECREATION STUDY                                       | REC  |
| SUBMERGED AQUATIC VEGETATION AND ALGAE STUDY           | SUB  |
| PASSAMAQUODDY TRIBE IMPACTS                            | TRI  |
| WATER QUANTITY AND FLOW STUDY                          | WAT# |
| WATER QUALITY AND MODELING STUDY                       | WATQ |
| WILDLIFE   | WILD |

Recommendations for studies were made by the following groups as identified by a coded legend for subsequent reference:

| Organization                           | Code / Legend |
|--|---------------|
| Tidewalker Associates                  | Tide          |
| Federal Energy Regulatory Commission   | FERC          |
| Me. Dept. Marine Resources             | DMR           |
| Me. Dept. Inland Fisheries & Wildlife  | IFW           |
| Me. Dept. of Environmental Protection  | DEP           |
| Passamaquoddy Tribe                    | PASS          |
| U.S. Department of Interior            | DOI           |
| U.S. Natl. Marine Fisheries Service    | NMFS          |
| Tribal Historical Preservation Officer | SOCT          |

The following studies were recommended for the assessment of the project's environmental impacts:

Tidewalker Associates / P-12704

| CODE | DESCRIPTION  | SOURCE |
|------|--|--------|
| ACCS | MORTALITY / INJURY OF TURBINE PASSAGE  | DMR    |
| ACCS | EFFECT OF ALTERATION OF ENTRY TO HALF MOON COVE THROUGH THE CONSTRUCTION OF THE PROJECT ON TRIBAL ECONOMICS, RECREATIONAL, AND CULTURAL USE OF HALF-MOON COVE AND ITS CURRENT ACCESS TO COASTAL WATERS | DOI    |
| ACCS | FISH, MARINE MAMMAL AND MACROINVERTEBRATE BEHAVIOR AND POTENTIAL TURBINE ENTRAINMENT   | DOI    |
| ACCS | TIDAL ZONE ACCESS  | SOCT   |
| AES  | AESTHETIC STUDY  | FERC   |
| ARCH | EFFECT OF ALTERATION OF THE INTERTIDAL ZONE AND CONSTRUCTION OF THE DAM ACROSS THE ENTRANCE TO HALF-MOON COVE ON THE ECONOMIC AND SOCIAL USES OF THE COVE BY THE PASSAMAQUODDY INDIAN TRIBE            | DOI    |
| ARCH | EFFECT OF ALTERATION OF THE INTERTIDAL ZONE AND CONSTRUCTION OF THE DAM ACROSS THE ENTRANCE TO HALF-MOON COVE ON THE TRADITIONAL CULTURAL USES OF THE COVE BY THE PASSAMAQUODDY INDIAN TRIBE           | DOI    |
| ARCH | EFFECT OF THE HALF MOON COVE TIDAL PROJECT ON CULTURAL SITES AND ACTIVITIES OF THE PASSAMAQUODDY INDIAN TRIBE  | DOI    |
| ARCH | CULTURAL SITES AND ACTIVITIES DISTURBANCE  | PASS   |
| ARCH | TRADITIONAL SUBSISTENCE FOOD GATHERING   | PASS   |
| ARCH | TRADITIONAL SUBSISTENCE FOOD GATHERING SURVEY  | SOCT   |
| ARCH | TRADITIONAL WATERWAY TRAVEL  | SOCT   |
| ARCH | ARCHAEOLOGICAL INVESTIGATION OF SITE IDENTIFIED BY MAINE HISTORIC PRESERVATION COMMISSION  | TIDE   |
| ASES | BIOLOGICAL AND CHEMICAL WATER QUALITY  | DEP    |
| ASES | EFFECT OF ALTERATION OF THE INTERTIDAL ZONE AND SUBMERGED ZONES ON FISH AND MAMMALIAN POPULATIONS WITH SPECIAL EMPHASIS ON THE PASSAMAQUODDY INDIAN TRIBE USE OF THESE RESOURCES                       | DOI    |
| ASES | EFFECT OF ALTERATION OF THE INTERTIDAL ZONE ON SHELLFISH INDUSTRY AND HARVESTING WITH SPECIAL INTEREST ON THE PASSAMAQUODDY INDIAN TRIBE'S USE OF THESE RESOURCES                                      | DOI    |
| ASES | EFFECT OF THE ALTERATION OF THE INTERTIDAL ZONE ON MIGRATORY AND RESIDENT SHOREBIRDS WITH SPECIAL EMPHASIS ON THE PASSAMAQUODDY INDIAN TRIBE USE OF THESE RESOURCES                                    | DOI    |
| ASES | EFFECT OF ALTERATION OF THE INTERTIDAL AND SUBMERGED ZONES ON FLORA AND FAUNA OF HALF MOON COVE WITH SPECIAL EMPHASIS ON THE PASSAMAQUODDY INDIAN TRIBE USE OF THESE RESOURCES                         | DOI    |
| ASES | FISH AND WILDLIFE HABITAT EVALUATION ASSESSMENT  | DOI    |
| ASES | SUBMERGED AQUATIC VEGETATION AND ALGAE STUDY   | FERC   |
| ASES | DOI (V): EFFECT OF ALTERATION OF THE INTERTIDAL ZONE ON MIGRATORY AND RESIDENT SHOREBIRDS  | IFW    |
| ASES | EVALUATION OF PROJECT OPERATION PLANS  | NMFS   |
| ASES | ASSESSMENT OF WATER QUALITY IMPACTS  | NMFS   |
| ASES | EVALUATING POTENTIAL FOR EROSION OF SUBSTRATE AT POWERHOUSE  | NMFS   |
| ASES | EVALUATION OF THE INVERTEBRATE COMMUNITY   | NMFS   |
| ASES | HABITAT ASSESSMENT WITHIN HALF MOON COVE   | NMFS   |
| ASES | MITIGATIVE BENEFITS OF BREACHING CAUSEWAY TO PASSAMAQUODDY BAY BOTH IN TERMS OF RESOURCE AND ENGINEERING VALUES  | TIDE   |
| ASES | CONFIRMATION ON POTENTIAL IMPACTS ON RARE, THREATENED, AND ENDANGERED SPECIES  | TIDE   |

Tidewalker Associates / P-12704

| <i>[ CONTINUATION OF PROPOSED STUDIES ]</i> |   |               |
|---|---|---------------|
| <b>CODE</b>                                 | <b>DESCRIPTION</b>  | <b>SOURCE</b> |
| CFR   | IMMEDIATE INITIATION OF DISCUSSIONS WITH REPRESENTATIVES OF THE PASSAMAQUODDY TRIBE   | TIDE          |
| CHAR  | DESIGNATED AND EXISTING USES  | DEP           |
| CHAR  | WILDLIFE RESOURCES  | DEP           |
| CHAR  | MAPPING OF INTERTIDAL AND SUBTIDAL HABITAT  | DMR           |
| CHAR  | AQUATIC AND TERRESTRIAL HABITAT AND LAND USE MAPPING  | DOI           |
| CHAR  | AQUATIC RESOURCES   | FERC          |
| CHAR  | RESIDENT TIME OF NUTRIENTS  | NMFS          |
| CHAR  | FISH PASSAGE FOR RESIDENT AND MIGRATORY SPECIES   | NMFS          |
| CHAR  | INFORMATION GATHERING AND ASSESSMENT OF IMPACTS ASSOCIATED WITH A MODIFIED TIDAL FLOW REGIME  | TIDE          |
| CONS  | BREACHING OF CAUSEWAY AND INSTALLING GATES  | DEP           |
| CONS  | CONSTRUCTION OF ROADWAY ACROSS DAM  | DEP           |
| CONS  | EVALUATE CONSTRUCTION RELATED IMPACTS   | NMFS          |
| CONS  | RELATIVE IMPACTS ASSOCIATED WITH ROCKFILL DAM VERSUS TIDAL METHOD OF CONSTRUCTION   | TIDE          |
| ECON  | PROJECT ECONOMICS AND FINANCIAL CAPABILITY  | DEP           |
| ECON  | REGULATORY REVIEW ON IMPACTS ON RIPARIAN RIGHTS   | TIDE          |
| HYD   | HYDRODYNAMIC MODEL OF HALF MOON COVE  | DOI           |
| HYD   | EFFECT OF ALTERATION OF THE INTERTIDAL ZONE ON THE PHYSICAL AND CHEMICAL CHARACTERISTICS OF HALF MOON COVE  | DOI           |
| HYD   | EFFECT OF THE ALTERATION OF THE INTERTIDAL ZONE AND CONSTRUCTION OF THE DAM ACROSS THE ENTRANCE TO HALF MOON COVE ON SHORELINE EROSION OF HALF MOON COVE            | DOI           |
| HYD   | EFFECT OF ALTERATION OF THE INTERTIDAL AND SUBMERGED ZONES AND CONSTRUCTION OF THE DAM ACROSS THE ENTRANCE TO HALF MOON COVE ON THE BENTHIC FAUNA OF HALF MOON COVE | DOI           |
| HYD   | WATER QUANTITY AND FLOW STUDY   | FERC          |
| HYD   | WATER QUALITY AND MODELING STUDY  | FERC          |
| HYD   | ESTIMATE CHANGES IN TIDE DURATION CURVE   | NMFS          |
| HYD   | IMPACTS ON WATER CIRCULATION  | NMFS          |
| HYD   | HALF MOON COVE SEDIMENT BUILD-UP  | PASS          |
| REC   | RECREATION STUDY  | FERC          |
| SURV  | SURVEY OF COMMERCIAL AND RECREATIONAL FISHERIES   | DMR           |
| SURV  | SURVEY OF INVERTEBRATES IN THE INTERTIDAL AND SUBTIDAL ZONE   | DMR           |
| SURV  | SURVEY OF LOBSTER RESOURCES AND HARVEST   | DMR           |
| SURV  | SURVEY OF MARINE MAMMALS IN THE STUDY AREA  | DMR           |
| SURV  | SURVEY OF PHYTOPLANKTON, ZOOPLANKTON, AND ICHTHYOPLANKTON   | DMR           |
| SURV  | SHORELINE POLLUTION SURVEY  | DOI           |
| SURV  | FISH SURVEY IN THE INTERTIDAL AND SUBTIDAL ZONE   | DOI           |
| SURV  | WATERFOWL, WADING BIRD, SHOREBIRD AND SEABIRD SURVEY IN THE INTERTIDAL AND SUBTIDAL ZONE  | DOI           |
| SURV  | ARCHEOLOGICAL AND HISTORIC RESOURCE SURVEY  | FERC          |
| SURV  | IDENTIFY HABITATS AFFECTED BY ALTERED TIDE REGIME   | NMFS          |
| SURV  | NATIVE PLANT FAUNAL SURVEY  | SOCT          |


During the period of the preliminary permit, Tidewalker is committed to the consideration of these proposed studies in accordance with our position taken in October 2009 and November 2009. A more detailed schedule appears below:

| STUDY PHASE                    | QTR 1 | QTR 2 | QTR 3 | QTR 4 | QTR 5 | QTR 6 | QTR 7 | QTR 8 | QTR 9 | QTR 10 | QTR 11 | QTR 12 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| <b>PUBLIC INTERACTION</b>      |       |       |       |       |       |       |       |       |       |        |        |        |
| LOCAL GOVERNMENTS              |       | ■     | ■     |       |       | ■     | ■     |       |       | ■      | ■      |        |
| TRIBAL COORDINATION            | ■     | ■     |       |       | ■     | ■     |       |       | ■     | ■      |        |        |
| REGIONAL STAKEHOLDERS          |       |       | ■     | ■     |       |       | ■     | ■     |       |        | ■      | ■      |
| <b>PLANNING</b>                |       |       |       |       |       |       |       |       |       |        |        |        |
| ORGANIZATIONAL STRUCTURE       | ■     |       |       |       |       |       |       |       |       |        |        |        |
| TIDEWALKER COORDINATION        | ■     | ■     |       |       |       |       |       |       |       |        |        |        |
| <b>ENVIRONMENTAL</b>           |       |       |       |       |       |       |       |       |       |        |        |        |
| HISTORICAL REVIEW              |       | ■     | ■     |       |       |       |       |       |       |        |        |        |
| LITERATURE RESEARCH            |       | ■     | ■     |       |       |       |       |       |       |        |        |        |
| SCIENTIFIC ASSESSMENT          |       |       |       |       |       |       | ■     | ■     | ■     | ■      | ■      | ■      |
| <b>ENGINEERING</b>             |       |       |       |       |       |       |       |       |       |        |        |        |
| MODE QUANTIFICATION            | ■     | ■     |       |       |       |       | ■     |       |       |        |        |        |
| TURBINE SPECIFICATION          |       | ■     | ■     |       |       |       |       |       |       |        |        |        |
| BARRAGE / GATE DESIGN          |       | ■     | ■     |       |       |       |       |       |       |        |        |        |
| <b>ECONOMICS</b>               |       |       |       |       |       |       |       |       |       |        |        |        |
| COST ESTIMATES                 |       |       | ■     | ■     |       |       |       |       |       |        |        |        |
| POWER PURCHASE AGREEMENTS      |       |       | ■     | ■     |       |       |       |       |       |        | ■      |        |
| USE OF ENERGY                  |       |       |       | ■     |       |       |       |       |       |        | ■      |        |
| <b>REGULATORY CONSULTATION</b> |       |       |       |       |       |       |       |       |       |        |        |        |
| INITIAL                        | ■     |       |       |       |       |       |       |       |       |        |        |        |
| PAD                            |       |       |       |       |       | ■     | ■     |       |       |        |        |        |
| PROJECT STUDIES                |       |       |       |       |       | ■     | ■     |       |       |        | ■      | ■      |
| <b>LICENSING</b>               |       |       |       |       |       |       |       |       |       |        |        |        |
| PAD SUBMISSION                 |       |       |       | ■     |       |       |       |       |       |        |        |        |
| STUDY COORDINATION             |       |       |       |       |       |       |       |       |       |        | ■      | ■      |
| <b>INFRASTRUCTURE DETAILS</b>  |       |       |       |       |       |       |       |       |       |        |        |        |
| TIDEWALKER STRUCTURE           |       |       | ■     | ■     |       |       |       |       |       |        |        |        |
| DEVELOPMENT ORGANIZATION       |       |       |       | ■     |       |       |       |       | ■     | ■      |        |        |

Tidewalker has included consultation with regulators and stakeholders starting with public interaction and continuing with regulatory consultation. Tidewalker is familiar with local issues and regional economic development objectives as a result of work performed during our initial preliminary permit and as a consequence of our residence in the project area (Trescott / Eastport). For the

above schedule, Quarter No. 1 refers to December (2010), January (2011), and February (2011). As a result of our previous experience on project development with the Half-Moon Cove site, Tidewalker will start work during the first quarter in drafting a pre-application document in compliance with FERC standards.

Submitted by:



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Normand Laberge, President

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**CERTIFICATE OF SERVICE**

I hereby certify that I will, within the timeframe and means established in 18 § C.F.R. 385.2010, serve the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

DATED this 16th day of January 2011

Signed by:



Normand Laberge, President

Tidewalker Associates  
46 Place Cove Road  
Trescott, Maine 04652

List of Addresses (official service list):

Governor Reuben Cleaves  
Passamaquoddy Tribe  
Pleasant Point Reservation  
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Office of Environmental Affairs  
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U.S. Army Corps of Engineers  
North Atlantic Division  
302 General Lee Avenue  
Fort Hamilton, NY 11252

Tidewalker Associates / P-12704

Director  
Bureau of Land Management  
Office of Lands  
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U.S. Coast Guard  
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CG-54133/Room 1407  
2100 2nd Street, SW  
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Note: Copies of this Schedule also sent electronically to interested parties on  
Tidewalker's address list