UNITED STATES OF AMERICA

BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

TRANSCANADA HYDRO NORTHEAST INC.

Wilder Hydroelectric Project (FERC Project No. 1892-026) Bellows Falls Hydroelectric Project (FERC Project No. 1855-045) Vernon Hydroelectric Project (FERC Project No. 1904-073)

Responses to Commission Staff's Identification of PAD Deficiencies, Requests for Additional Information, and Status of Study Reports

April 15, 2013

TABLE OF CONTENTS

INTRODUC	TION1
A. RESPO	ONSE TO PAD DEFICIENCIES
Wilder, B	Bellows Falls, and Vernon Hydroelectric Projects
1. P	Project Facilities and Operations2
2. G	Geology, Topography & Soils2
3. R	Recreation and Land Use8
B. ADDIT	IONAL INFORMATION REQUESTS
Wilder Hy	ydroelectric Project15
1. R	Recreation and Land Use15
2. C	Cultural Resources
Bellows F	Falls Hydroelectric Project 18
1. P	Project Facilities and Operations
2. R	Recreation and Land Use19
3. C	Cultural Resources
Vernon H	Hydroelectric Project24
1. R	Recreation and Land Use24
C. STUDY	(REPORTS
	TIONAL COMMENTS FOR PRELIMINARY LICENSING PROPOSAL AND PPLICATION

Attachment A - Project Mapbooks

Attachment B - Stantec 2013 Report - Westboro Rail Yard

Attachment C - Stantec 2012 Report - Westboro Rail Yard

Attachment D - TransCanada Stantec email correspondence - Westboro Rail Yard

Attachment E - Cultural Resources Mapbooks

Attachment F - Phase 1A Archaeological Reconnaissance Survey - Vernon

Attachment G - Holmes et al. 1991 Report - Archaeological Reconnaisssance Survey for the Proposed Riverbank Erosion Control Study

Attachment H – Normandeau 2012 Water Quality Monitoring Report, Data and TransCanada email correspondence with resources agencies

INTRODUCTION

On October 31, 2012, TransCanada Hydro Northeast Inc. ("TransCanada") filed with the Federal Energy Regulatory Commission ("Commission" or "FERC"), Notices of Intent to file applications for new licenses for the existing Wilder Hydroelectric Project (FERC Project No. 1892-026); Bellows Falls Hydroelectric Project (FERC Project No. 1892-026); Bellows Falls Hydroelectric Project No. 1904-073) ("Projects") in accordance with 18 C.F.R. § 5.5. The current license for each Project expires on April 30, 2018. TransCanada is using FERC's Integrated Licensing Process (ILP) as set forth in Title 18 of the US Code of Federal Regulations (C.F.R.), Part 5 to relicense the three Projects.

Simultaneous to filing of the NOIs, TransCanada filed Preliminary Application Documents (PADs) for each of the three Projects. The PADs provided FERC and interested parties with summaries of existing, relevant, and reasonably available information that was in TransCanada's possession as supplemented by a due diligence search of other sources of information about the Projects and related environmental resources.

On March 1, 2013, the Commission issued a directive to TransCanada related to certain deficiencies in the PADs. The Commission also determined that there is a need for additional information (AIRs), and issued study requests in order to gain information necessary for preparation of environmental documents related to relicensing of the three Projects.

This document constitutes TransCanada's response to the Commission's March 1, 2013 directive on PAD deficiencies, and requests for additional information. The Commission's study requests also included in the March 1, 2013 directive are addressed in a simultaneous filing of TransCanada's Proposed Study Plan (PSP).

A. RESPONSE TO PAD DEFICIENCIES

Wilder, Bellows Falls, and Vernon Hydroelectric Projects

1. Project Facilities and Operations

a. Deficiency: "Please provide land use maps which include key features such as the [Wilder] project boundary and TransCanada facilities within or adjacent to the impoundment as required per § 5.6(d)(2)(ii) of the regulations."

a. Response: Large-scale mapbooks for the Wilder, Bellows Falls, and Vernon Projects are being filed in Attachment A to this PAD deficiency/AIR response. The project boundary and project facilities (including project recreational facilities owned and managed by TransCanada) are shown. GIS ESRI files (.dbf; .prj; .sbn; .sbx; .shp; .xml; and .shx) depicting the project boundary are also being filed as compressed digital files under the file names WilderFACILITY.zip, Bellows FallsFACILITY.zip and VernonFACILITY.zip

b. Deficiency: "Please provide the dependable capacity of the [Wilder] project and the basis for the determination of the dependable capacity as required per (5.6(d)(2)) (iii)(E) of the regulations."

b. Response: The most recent dependable capacity (seasonal claimed capacity) for each project as reported to ISO-NE is as follows. Wilder is tested in the winter and summer each year; Bellows Falls and Vernon are calculated based on hydraulics.

Seasonal Claimed Capacity (MW)	Winter	Summer
Wilder	41.156	39.083
Bellows Falls	48.54	48.54
Vernon	32.0	32.0

2. Geology, Topography, and Soils

a. Deficiency: "The PAD provides general information about soil types along the reservoir; however it does not provide maps. Therefore, please provide mapping at a usable scale showing the existing geology, topography, and soils along the reservoir as required by § 5.6(d)(3)(ii) of the regulations."

a. Response: Large-scale mapbooks for the Wilder, Bellows Falls and Vernon Projects are being filed in Attachment A to this PAD deficiency/AIR response. Existing geology, topography and soil types are depicted. GIS ESRI files (.dbf; .prj;

.sbn; .sbx; .shp; .xml; and .shx) depicting the soils and geology are being filed as a compressed digital files under the file names WilderSOIL.zip, BellowsFallsSOIL.zip, VernonSOIL.zip

b. Deficiency: "The PAD provides general information about erosion along the reservoir, however it does not provide descriptions and maps. Therefore, please provide a description of the reservoir shoreline erosion sites as required by § 5.6(d)(3)(ii)(C) of the regulations, including steepness, composition, cover, and a description of existing instability including a description of project operations that are known to, or may cause, these instabilities."

b. Response: Because all of the detail regarding each specific location where erosion is present along reservoirs currently does not exist, it was not included in the PADs in accordance with 18 C.F.R. § 5.6 (d)(3). TransCanada is proposing three erosion studies (Studies 1, 2, and 3) n the Proposed Study Plan (PSP) in response to study requests that will provide additional information about specific erosion sites. However, much of the data requested is available in the *Lower Connecticut River Shoreline Survey Report – 2010* conducted for TransCanada by Kleinschmidt Associates, Inc. A summary of that information is presented in the following tables. The individual erosion sites summarized in these tables are shown in the mapbooks referenced in the previous response. The Kleinschmidt report had not been finalized by the date of PAD filing, but it has been provided to Commission staff and is now available at <u>www.transcanda-relicensing.com</u>.

Type, Land Use and Land Cover	Feet
Active (Major)	41,813.5
Agricultural	37,895.1
Other	37,895.1
Bank Scour	2,838.3
Bank Slumping	34,958.9
Upper Bank Scour	97.9
Forested	3,223.7
Conifer	588.7
Bank Slumping	588.7
Deciduous	1,119.7
Bank Slumping	1,119.7
Mixedwood	1,515.3
Bank Slumping	1,515.3
Grassland	519.0
Manicured Lawn	519.0
Bank Slumping	519.0
Residential	175.8
Mixedwood	175.8
Bank Scour	97.1
Bank Slumping	78.7
Active (Minor)	3,880.0
Agricultural	3,580.2
Other	3,580.2
Bank Slumping	3,580.2
Forested	99.9
Mixedwood	99.9
Bank Slumping	99.9
Residential	199.8
Manicured Lawn	199.8
Bank Slumping	199.8
Historic-Stabilized	21,458.2
Forested	13,235.1
Deciduous	354.1
Bank Slumping	354.1
Mixedwood	12,881.0
Other	12,881.0

Wilder Project Erosion (from Kleinschmidt, 2010)

Type, Land Use and Land Cover	Feet
Industrial	3,140.2
Other	3,140.2
Other	3,140.2
Residential	5,082.9
Manicured Lawn	1,603.6
Bank Slumping	499.8
Other	1,103.7
Mixedwood	3,479.3
Bank Slumping	199.1
Other	3,180.6
Upper Bank Scour	99.5
Grand Total	67,151.6

Bellows Falls Project Erosion (from Kleinschmidt, 2010)

Type, Land Use and Land Cover	Feet
Active (Major)	32,009.5
Agricultural	23,279.0
Farmland	23,279.0
Bank Slumping	23,279.0
Commercial	99.7
Other	99.7
Bank Slumping	99.7
Forested	4,431.7
Conifer	1,048.8
Bank Slumping	1,048.8
Deciduous	740.6
Bank Slumping	740.6
Mixedwood	2,642.3
Bank Slumping	2,642.3
Industrial	187.8
Other	187.8
Bank Slumping	187.8
Residential	4,011.2
Manicured Lawn	1,138.9

Type, Land Use and Land Cover	Feet
Bank Slumping	1,138.9
Mixedwood	2,872.3
Bank Slumping	2,872.3
Active (Minor)	1,811.0
Agricultural	480.2
Farmland	480.2
Bank Slumping	480.2
Forested	522.6
Forested Wetland	522.6
Bank Slumping	522.6
Grassland	558.6
Shrubland	558.6
Bank Scour	558.6
Industrial	249.6
Other	249.6
Bank Slumping	249.6
Total	33,820.5

Vernon Project Erosion (from Kleinschmidt, 2010)

Type, Land Use and Land Cover	Feet
Active (Major)	3,854.7
Agricultural	2,245.7
Farmland	2,245.7
Bank Slumping	2,245.7
Forested	1,333.8
Deciduous	173.8
Bank Slumping	173.8
Mixedwood	1,159.9
Bank Slumping	1,159.9
Residential	275.3
Manicured Lawn	275.3
Bank Slumping	275.3
Active (Minor)	4,130.9

Type, Land Use and Land Cover	Feet
Agricultural	1,649.8
Farmland	1,649.8
Bank Slumping	1,649.8
Forested	2,481.0
Deciduous	2,181.7
Bank Slumping	2,181.7
Mixedwood	299.3
Bank Slumping	299.3
Total	7,985.6

c. Deficiency: "In particular, we note the presence of a brownfield site at the Westboro Railyard, in West Lebanon, NH, just below the confluence of the White River. The issues raised in the public meetings highlighted the potential for mobilization of contaminated materials or groundwater into the Connecticut River, exacerbated by the operation of the project. Therefore, when correcting the deficiency, please also include any additional information associated with this brownfield site and as it may pertain to this concern."

c. Response: TransCanada disputes the claim that this issue constitutes a deficiency to the PAD. There is no evidence that suggests that this location, which is outside the project boundary, is affected by the Wilder Project. The supporting information we are providing responds to the request for "any additional information associated with this site as it may pertain to this concern." We have identified two reports, one of which was published in January 2013, after the release of the PAD.

As described below, we believe that these reports formed the basis of the claim expressed by representatives from the City of Lebanon and in public comments during the scoping meeting. However, in our opinion, the reports were either misinterpreted or the statements in the reports were misquoted at the scoping meeting. There are two discussions in the 2013 Stantec document for which a "possible contribution" from "periodic water level fluctuations" in the river and ongoing detection of petroleum products in monitoring wells seem to be occurring. However, we believe, and subsequently confirmed, the author of the report is referring to seasonal runoff or periodic high flow levels not the sub-daily flow levels associated with dispatched generation and project operations. The following paragraphs summarize the issue.

The Westboro Railyard is located along the east side of the Connecticut River at is confluence with the White River. The site was in active use from 1848 through the late 1970s. After 20 years of inactivity, rail service was restored at the site through an agreement between the New Hampshire Department of Transportation and the Claremont Concord Rail Company, which currently uses a portion of the property for

rail storage. The site encompasses the entire former railyard including the former Tidewater Oil site and the former Purcell Oil facility. On December 9, 1974, oil was observed on the surface of the Connecticut River about 10 feet from the river's east bank, which forms the western boundary of the Westboro Railyard site. The site has been investigated and various remedial measures implemented since then. A summary of the history of the site is provided on pages 1-11 in: *"2012 Groundwater Monitoring Summary Report and GMP Renewal Application, Westboro Roundhouse, 26 Railroad Avenue, West Lebanon, New Hampshire, 03784, NHDES Site #: 199210036, Project Type: LAST, Project Numbers: 3990 and 13124 (Stantec, 2013)." The full report is included as Attachment B _to this PAD deficiency/AIR response.*

Stantec (2013) suggests that the likely cause of detections of petroleum products in groundwater monitoring wells between the suspected source and the riverbank is periodic water level fluctuations in the river coupled with the presence of the clay berm installed parallel to the Connecticut River as part of an oil containment system installed in 1975. The source document for Stantec's statement is: *"Results of Laser Induced Fluorescence Survey, Westboro Roundhouse, 26 Railroad Avenue, West Lebanon, New Hampshire, 03784, NHDES Site #: 199210036, Project Type: LAST, Project Numbers: 3990 (Stantec, 2012)."* The full report is included as Attachment C to this PAD deficiency/AIR response.

We reviewed the source documents, which provide an explanation of the suggested relationship of water fluctuations in the river and detection of petroleum products in monitoring wells. Based on our review, during periods of high flood flows, the normal flow of groundwater towards the river is reversed, which causes petroleum product migration from the area toward the river to slow or stop. This causes petroleum products to pool along the riverbank in the vicinity of the monitoring wells and causes them to be detected during monitoring events.

It appears that "fluctuating flows" stated in the reports refers to seasonal high water events that correspond to natural inflow below the Wilder dam or that exceed Wilder's generating capacity and TransCanada's ability to control or manage those flows through project operations. There is no evidence that project operations are exacerbating the mobilization of contaminated materials or groundwater in the river.

Our conclusion is supported by the March 15, 2013, email communication from Stantec, specifically from the Project Manager, Leigh-Anne Sapienza, for the subject monitoring and reports. She states, "The discussion of the inundation of WP-6 refers to seasonal high water events." A copy of this email communication is included as Attachment D to this PAD deficiency/AIR response.

3. Recreation and Land Use

a. Deficiency: "For each recreation facility within or adjacent to the project boundary, please provide a description of the facility, uses, location, ownership, capacity, and management (all three PAD's)."

a. Response: Presented below are revised versions of the Wilder, Bellows Falls, and Vernon PAD tables listing recreation sites within the project boundary (table 3.10-1 in each PAD), to include known information related to TransCanada's ownership status and proximity within the project boundary.

These additions are shown in **bold italics** in the tables below. In preparing these revised tables, our research showed two sites (Norwich Landing and East Wilder Boat Launch) in the Wilder PAD were incorrectly identified as TransCanada-owned sites. These sites are not owned by TransCanada but lie adjacent to the project boundary.

Information on recreational capacity does not exist, so was not included in the PADs in accordance with 18 C.F.R. § 5.6 (d)(3). TransCanada is proposing a recreation facility inventory and use and needs study in the Proposed Study Plan (PSP) in response to study requests that will provide additional information about recreation facility capacity.

In addition to the changes in the tables, TransCanada has prepared revised recreation figures showing the project recreation sites relative to the project boundary and land ownership status surrounding those sites. These figures were created to address PAD deficiency A.1.a above and are being filed as Attachment A to this PAD deficiency/AIR response.

Recreation Sites within the Wilder Project Boundary (updated table 3.10-1 from the Wilder PAD; Sources: CRJC, 2008; Pollock, 2009).

Site Name	Site Type	RM	Town	Manager	Owned by TransCanada	Inside Project Boundary
Newbury-Haverhill Bridge Access	Boat ramp (improved)	257.5	Haverhill, VT	VTDFG		
Bedell Bridge State Park	Boat rap (improved) and picnicking	255	Haverhill, NH	NH Parks and Recreation		
Bugbee Landing Access Point	Ramp (small dock with unimproved ramp)	248	Bradford, VT	VTDFG		
Orford Boat Landing	Boat ramp (improved)	239	Orford, NH	Town of Orford with NH Fish & Game Dept.		
Richardson Conservation Land	Boat launch (walk in carry/car-top access)	234	Orford, NH	Town of Orford		
North Thetford Landing	Boat ramp (improved)	232.5	Thetford, VT	State of VT		
Hewes Brook Boat Launch	Boat launch (car-top access)	228	Lyme, NH	Lyme Conservation Commission		
Ompompanoosuc Launch	Boat launch (unimproved ramp)	225	Pompanoosuc , VT	State of VT		
Norwich Landing	Boat launch (car-top access)	216	Norwich, VT	Town of Norwich	No	No

Site Name	Site Type	RM	Town	Manager	Owned by TransCanada	Inside Project Boundary
Fullington Landing	Boat Ramp (improved)	221	Hanover, NH	NH Fish & Game Dept.		
Ledyard Canoe Club	Canoe launch	218.5	Hanover, NH	Dartmouth College		
East Wilder Boat Launch	Boat Ramp (improved)	216	West Lebanon, NH	City of Lebanon	No	No
Hartford (Wilder) Picnic Area at Kilowatt Park*	Small dock and day use area	219.3	Hartford, VT	Town of Hartford, VT	Yes	Yes
Wilder Dam (Olcott Falls) Boat Launch [*]	Boat launch (improved), athletic fields and picnic facilities	216	Hartford, VT	Town of Hartford, VT	Yes	Yes
Fishladder & Angler Parking*	Angler access	215	Hartford, VT	TransCanada	Yes	Yes
Lebanon (Wilder Dam) Picnic Area, Vista, and hiking trails [*]	Day use (hiking and picnicking)	215	West Lebanon, NH	TransCanada	Yes	Yes
Wilder Dam Portage and downstream natural areas*	Portage trail, angler access, and natural area	215.5	West Lebanon, NH	TransCanada	Yes	Yes

Notes: ^{*} indicates TransCanada recreation site as noted on the current FERC approved Exhibit R – Recreation Map.

Recreation Sites within the Bellows Falls Project Boundary (updated table 3.10-1 from the Bellows Falls PAD; Source: CRJC, 2008).

Site Name	Site Type	RM	Town	Manager	Owned by TransCanada	Inside Project Boundary
Andrews Road	Boat ramp (cartop)	192	Claremont, NH	State of NH		
Wilgus State Park	Boat ramp (cartop)	191	Weathersfield, VT	State of VT		
Ashley Ferry Boat Landing	Boat ramp	187	Claremont, NH	State of NH		
Hoyts Landing	Boat ramp and fishing platform	179	Springfield, VT	State of VT		
Patch Park	Boat ramp (cartop, unimproved)	178	Charlestown, NH	Town of Charlestown		
Charlestown Boat Launch and Picnic Area ^a	Boat ramp and picnicking	177	Charlestown, NH	TransCanada	Yes	Yes
Green Mountain Marina	Boat ramp and marina	173.5	Rockingham, VT	Private		
Herrick's Cove Boat Launch & Picnic Area ^a	Boat ramp and picnic site	173	Rockingham, VT	TransCanada	Yes	Yes
Pine Street Boat Launch and Portage Trail Take-Out ^a	Boat ramp	170	N. Walpole, NH	TransCanada	Yes	Yes
Bellows Falls Fish Ladder Visitor Center ^a	Environmental education	169.2	Rockingham, VT	TransCanada	Yes	Yes
Bellows Falls Dam Portage Put-In ^a	Boat ramp (cartop), and Portage trail	168.5	Walpole, NH	TransCanada	Yes	Yes

Indicates TransCanada recreation site as noted on the current FERC-approved Exhibit R – Recreation Map.

Recreation Sites within the Vernon Project Boundary (updated table 3.10-1 from Vernon PAD; Source: CRJC, 2008).

Site Name	Site Type	RM	Town	Manager	Owned by TransCanad a	Inside Project Boundary
Putney Boat Landing	Boat ramp	157	Putney, VT	State of VT		
Dummerston Landing	Boat ramp (cartop)	152	Dummerstow n, VT	State of VT		
River Road Access	Boat ramp	149	Chesterfield, NH	Town of Chesterfield, NH		
Old Ferry Road Access	Boat ramp	147	Brattleboro, VT	State of VT		
Retreat Meadows Boat Launch	Boat ramp (cartop)	145	Brattleboro, VT	Brattleboro Retreat		
West River Marina	Commercial marina	145	Brattleboro, VT	Private (open to public)		
Norm's Marina	Boat ramp	144	Hinsdale, NH	Private (open to public, fee)		
Hinsdale Island	Boat ramp (cartop)	144	Hinsdale, NH	State of NH		
Fisherman Access Area [*]	Angler Access	142	Vernon, VT	TransCanada	Yes	No
Prospect Street Launch	Boat ramp	139	Hinsdale, NH	Town of Hinsdale, NH		
Vernon Canoe Portage*	Canoe Portage Take-out	138	Vernon, VT	TransCanada	Yes	Yes
Vernon Glen Picnic Area [*]	Picnic Area	138	Vernon, VT	TransCanada	Yes	Yes

Site Name	Site Type	RM	Town	Manager	Owned by TransCanad a	Inside Project Boundary
Vernon (Governor Hunt) Recreation Area & Boat Launch [*] (below Vernon dam)	Boat ramp (cartop only above the dam) and fish ladder display area	137	Vernon, VT	TransCanada	Yes	Yes
Vernon Neck Open Space*	Open Space	136	Hinsdale, NH	TransCanada	Yes	Yes

Notes: ^{*} indicates TransCanada recreation site as noted on the current FERC approved Exhibit R – Recreation.

B. ADDITIONAL INFORMATION REQUESTS

Wilder Hydroelectric Project

1. Recreation and Land Use

a. AIR: "Although Figure 3.10-1 [in the PAD] provides a map of the Wilder project boundary and recreation sites, it is difficult to discern the exact location of these sites with respect to one another and whether each site is located within the project boundary. Please map this area in greater detail (i.e., larger scale) including the project boundary and recreation facilities as displayed in Figure 3.10-1."

a. Response: A large-scale mapbook for the Wilder Project is included in Attachment A to this PAD deficiency/AIR response. The Wilder Project boundary, project facilities, including project recreational facilities owned and managed by TransCanada are shown. GIS ESRI files (.dbf; .prj; .sbn; .sbx; .shp; .xml; and. shx) depicting the project boundary are being filed as a compressed digital file under the file name WilderFACILITY.zip

This mapbook contains revised recreation figures showing the project recreation sites relative to the project boundary and land ownership status surrounding those sites. These figures were created to also address the PAD deficiency A.1.a above.

b. AIR: "When detailing recreation use estimates, the PAD references a TransCanada 2009 document in Section 3.10.3 that is not listed in the references. Please provide the reference for the document, methods of data collection, and an explanation of how use estimates were derived."

b. Response: The correct reference for this, relative to the Wilder, Bellows Falls and Vernon Projects is:

TransCanada. 2009. TransCanada Licensed Hydropower Development Recreation Report (FERC Form 80 Report). April 2009.

Data collection methods included observations from staff, professional judgment, use information from local area clubs (e.g., snowmobile, fishing, etc.), anecdotal evidence from law enforcement officials that visit the site on peak weekends, and population growth projections for the local areas.

c. AIR: "Please provide any existing information and maps on land use and land classification for all lands within the project boundary, associated buffers, the authorized non-project use of project lands, and to the extent known, any lands immediately adjacent to the project boundary and within the floodplain. In addition to a general description, this information should include aerial photographs and local or regional planning agency land use classifications."

c. Response: A large-scale mapbook for the Wilder Project is included in Attachment A to this PAD deficiency/AIR response. The Wilder Project land cover maps show the land cover type classifications for lands adjacent to and within the

project boundary. These maps show the land cover classifications previously presented in figure 3-7.2 in the PAD at a much closer scale. GIS ESRI files (.dbf; .prj; .sbn; .sbx; .shp; .xml; and. shx) depicting the project boundary are being filed as a compressed digital file under the file name WilderLAND.zip

d. AIR: "Please provide further explanation of TransCanada's shoreline management practices including the number of permits issued, standard permit conditions, clarification of New Hampshire state requirements for minimum shoreline buffer, and any other pertinent information related to shoreline management."

d. Response: TransCanada has not entered into any agreements for non-project use of project lands within the Wilder Project. Information related to the two lease agreements currently in place at the Bellows Falls Project is included in the response to Bellows Falls AIR 1.d below.

The following provides additional information related to the New Hampshire state requirements for minimum shoreline buffers and other pertinent information related to permitting development along shoreline and general shoreline management of the Connecticut River in the state.

New Hampshire Shoreland Water Quality Protection Act (NH RSA 483B) – Summary of Requirements

A state Shoreland Permit is required for most new construction, excavation or filling in the protected shoreland, although some waivers are allowed. The intent of the law and implementing regulations (Env-Wq 1400) is to minimize water quality impacts from riverfront development. The law and permitting applies only to new construction, change in size of existing structures or impervious surfaces, and the like, not to existing conditions.

The Connecticut River along its entire NH length is regulated under NH RSA 483B. The protected shoreland area is referenced from the high water mark of a river. Requirements and restrictions are based on the setback distance from the reference line, increasing with proximity to the water body, as summarized below:

Within 250 feet from the reference line – The Protected Shoreland (under NH RSA 483B)

Impervious Surface Area Limitation

If a homeowner or developer wishes to exceed 30% impervious surface coverage of the area of the lot within the protected shoreland, a stormwater management system designed and certified by a professional engineer that will not concentrate stormwater runoff or contribute to erosion must be implemented and if any grid segment within the waterfront buffer (see below) does not meet the minimum required 50 point tree, sapling, shrub and groundcover score, each deficient grid segment must be planted with additional vegetation to at least achieve the minimum required score. If a homeowner or developer wishes to exceed 20% impervious area, a stormwater management plan must be implemented to infiltrate increased stormwater from development.

Other Restrictions

- There can be no establishment/expansion of salt storage yards, auto junk yards, solid waste and hazardous waste facilities.
- Setback requirements for all new septic systems are determined by soil characteristics.
 - 75 feet for rivers and areas where the there is no restrictive layer within 18 inches and where the soil down gradient is not porous sand and gravel (perc>2 min.).
 - 100 feet for soils with a restrictive layer within 18 inches of the natural soil surface.
 - 125 feet where the soil down gradient of the leachfield is porous sand and gravel (perc rate equal to or faster than 2min/in.).
- When selling developed waterfront property, a *Site Assessment Study* is required for all properties with on-site septic that are contiguous to or within 200 feet of waterbodies subject to the Act.
- An Alteration of Terrain Permit is required for any project that proposes to disturb more than 50,000 sq ft of contiguous terrain if any portion of the project is within the protected shoreland or disturbs an area having a grade of 25% or greater within 50 feet of any surface water.

From 50 – 150 feet from the reference line – Natural Woodland Buffer Limitations

• At least 25 percent of the area between 50 feet and 150 feet from the reference line must be maintained in an unaltered state. Unaltered State means vegetation is allowed to grow without cutting, limbing, trimming, pruning, mowing or other similar activities except as needed for plant health, normal maintenance and renewal. Existing lawns, fields and beaches and landscaped areas are not considered unaltered areas.

From 0 – 50 feet from the reference line – Waterfront Buffer and Primary Building Setback.

- All primary structures must be set back at least 50 feet from the reference line. Towns may maintain or enact greater setbacks.
- Within 50 feet from the reference line, a waterfront buffer must be maintained. Within the waterfront buffer, tree coverage is managed with a 50 x 50 foot grid and point system, based on a minimum number and size of trees. Trees and saplings may be removed provided the sum score of the remaining trees, saplings, shrubs and groundcover within the affected grid segment is at least 50 points (see

http://des.nh.gov/organization/commissioner/pip/factsheets/sp/docum ents/sp-5.pdf for details on the point/grid system).

- No natural ground cover can be removed except for a footpath to the water that does not exceed 6 feet in width and does not concentrate stormwater or contribute to erosion. Natural ground cover must remain intact. No cutting or removal of vegetation below 3 feet in height (excluding previously existing lawns and landscaped areas).
- Stumps, roots, and rocks must remain intact in and on the ground unless specifically approved by the department.
- Pesticide and herbicide applications can be applied by a licensed applicator only.
- Only low phosphorus, slow release nitrogen fertilizer can be used beyond 25 feet of the reference line. Only limestone may be used within 25 feet of the reference line.

2. Cultural Resources

a. AIR: In section 4.10.2 [of the PAD], you propose to conduct a cultural resources study that may include Phase IB Intensive Archaeological Investigations. You also propose to formally evaluate the National Register of Historic Places (National Register)-eligibility of the project facilities. However, you have not provided a map specifically defining the APE, and we are unclear on how you would specifically carry out the various tasks involving your proposed study [items a) through h) in the detailed AIR for this resource].

a. Response: The response to this AIR can be found in the Proposed Study Plan (PSP) (Study 33), which is being filed concurrently with this PAD deficiency/AIR response. The proposed study addresses the elements noted in this AIR. APE maps are included as Attachment E to this filing. The Wilder Phase1A report described in Study Plan 33 will be eFiled as a restricted document due to the sensitive nature of the information in the report, with the Commission by May 15, 2013.

Bellows Falls Hydroelectric Project

1. Project Facilities and Operations

a. AIR: On page 3-128 the PAD states the shoreline of the reservoir is 72 miles; however, on pages 2-24 and 3-18 it states it is 74 miles long. Therefore, so that we may fully understand and evaluate your proposal and determine the appropriate studies needed, please provide clarification regarding the length of the reservoir shoreline.

a. Response: The length of the shoreline is approximately 74 miles long; however, this value is an estimated length only and not based on a precise ground survey.

2. Recreation and Land Use

a. AIR: "Although Figure 3.10-1 [in the PAD] provides a map of the Bellows Falls project boundary and recreation sites, it is difficult to discern the exact location of these sites with respect to one another and whether each site is located within the project boundary. Please map this area in greater detail (i.e., larger scale) including the project boundary and recreation facilities as displayed in Figure 3.10-1."

a. Response: A large-scale mapbook for the Bellows Falls Project is included as Attachment A to this PAD deficiency/AIR response. The Bellows Falls project boundary, project facilities, including project recreational facilities owned and managed by TransCanada are shown. GIS ESRI files (.dbf; .prj; .sbn; .sbx; .shp; .xml; and .shx) depicting the project boundary are being filed as a compressed digital file under the file name BellowsFallsFACILITY.zip

c. AIR: "Please provide any existing information and maps on land use and land classification for all lands within the project boundary, associated buffers, the authorized non-project use of project lands, and to the extent known, any lands immediately adjacent to the project boundary and within the floodplain. In addition to a general description, this information should include aerial photographs and local or regional planning agency land use classifications."

c. Response: A large-scale mapbook for the Bellows Falls Project is included in Attachment A to this PAD deficiency/AIR response. The Bellows Falls Project land cover maps show the land cover type classifications for lands adjacent to and within the project boundary. These maps show the land cover classifications previously presented in figure 3-7.2 in the PAD at a much closer scale. GIS ESRI files (.dbf; .prj; .sbn; .sbx; .shp; .xml; and .shx) depicting the project boundary are being filed as a compressed digital file under the file name BellowsFallsLAND.zip

d. AIR: "Please provide further explanation of TransCanada's shoreline management practices including the number of permits issued, standard permit conditions, clarification of New Hampshire state requirements for minimum shoreline buffer, and any other pertinent information related to shoreline management."

d. Response: With regard to a clarification of New Hampshire state requirements for minimum shoreline buffers, please refer to the response to AIR B.1.d related to the Wilder Project, above.

TransCanada does have agreements with local farmers (Agricultural Licenses) for TransCanada owned land within the Bellows Falls project boundary (sites recognized by the local names of Upper Meadows, Great Meadows and Lower Meadows on USGS topo and other maps). The Bellows Falls Project TransCanada Recreation Sites & Land Ownership maps referenced above as part of the response to the deficiency A.3.a shows lands within the project boundary that are under agricultural lease and actively farmed. These authorized non-project uses of project lands are executed under Agricultural License Agreements issued by TransCanada to the farmers. Two articles within the license, Article 3: Use and Maintenance, and Article 13 Water; Environmental, directly address farmers' use of the properties and their environmental stewardship of the land. Article 13 specifically includes language requiring the farmer to maintain a 100-foot buffer between the fields and the Connecticut River. Currently there are two such agreements in place at the Bellows Falls Project.

TransCanada Agricultural License Agreement articles:

USE AND MAINTENANCE

Licensee agrees to use the Property only for agricultural purposes, in accordance with the best management practices, applicable to the crop, published by the New Hampshire Department of Agriculture, Markets & Food and the Vermont Agency of Agriculture, Food and Markets (as applicable depending on location of the land), and to do so in a manner consistent with the agricultural practices and standards of state and county where the land is located, and to allow the Property to qualify as agricultural land for property tax purposes.

Licensee shall maintain the Property, which includes all improvements located thereon, in the same condition and state of repair as exists as of the date of the commencement of this Agreement, or with respect to any improvements which may be subsequently added to or become a part of the Property, as of the date said improvements were completed, ordinary wear thereof and damages by the elements or other acts of God excepted. TransCanada shall have the right to enter upon and inspect the Property and the operations of Licensee thereon, to ensure Licensee's proper maintenance. TransCanada shall notify Licensee prior to such inspections, for purposes of coordinating TransCanada's entry with respect to any pesticide or herbicide applications.

Licensee shall have the right, at Licensee's own expense (unless otherwise agreed in writing by the parties hereto), to make or permit to be made, from time to time during the term of this Agreement, such alterations, additions, modifications, changes and repairs in and to the Property as Licensee may find necessary or convenient for operation of the Property for the agricultural purposes permitted herein; provided, however, that Licensee shall not make any alteration, addition, modification, change or repair that will decrease the value of, or constitute waste with respect to, the Property. Any alteration, addition, modification, change or repair shall become the sole and exclusive property of TransCanada, unless otherwise agreed in writing by the parties hereto. Other than provided herein, Licensee shall not, without the prior written consent of TransCanada, erect any structures or fencing, make any alteration to the permanent water delivery system on or about the Property, or cut any trees or make any alterations or improvements to the non-agricultural portions of the Property.

All equipment installed on the Property by Licensee and all furniture, fixtures and other personal property placed upon the Property by Licensee, shall remain the property of Licensee and Licensee shall be required upon the expiration of the term of this Agreement or earlier termination, to remove diligently and expeditiously any and all of said equipment, furniture, fixtures, or other personal property from the Property at Licensee's cost and expense; provided, however, that Licensee may, upon obtaining advance written approval from TransCanada, leave such equipment, furniture, fixtures or other personal property on the Property upon expiration of the Agreement term, in which event such property shall become the property of TransCanada.

In the case of any injury or damage to the Property resulting from Licensee's removal of any equipment, furniture, fixtures or other personal property, Licensee shall promptly repair the same, at its expense, in a good and workmanlike manner.

Licensee shall not prevent or obstruct TransCanada's access to the Property. If Licensee installs gates or fences at the Property, Licensee shall provide TransCanada with keys to all locks.

Licensee shall:

Take all actions and do all things necessary to comply with and abide by all laws, rules, regulations, and ordinances, as the same may be amended, supplemented or otherwise modified, enacted or promulgated, by the United States, the State of New Hampshire or Vermont (as applicable depending on location of the land), any municipality or local government, or any irrigation district, flood control district or similar organization, and their agents, respecting or affecting the Property;

Obtain and maintain in force State Worker's Compensation Insurance on all employees for only those who enter the Property in such amounts required by applicable laws, rules and regulations; and

Assure that those portions of the Property not planted in crops are kept free of weeds and are otherwise maintained in a manner to comply with all applicable laws, rules, regulations, guidelines and directives of any applicable governmental agency, body, or board of commission.

Licensee shall comply with the laws of the State of Vermont, Windham County, and Sullivan County, New Hampshire (as applicable depending on location of the land), and the United States, applicable to the use of herbicides, pesticides, insecticides, defoliants, non-organic fertilizers, soil conditioners, fuels, lubricants and other potentially hazardous substances in the conduct of farming operations on the Property. Licensee shall not apply any pesticide, herbicide or chemical product on the Property which may leave a residue that will adversely affect the growing of crops. Upon the termination of this Agreement, Licensee shall furnish to TransCanada a written list of the chemicals applied to the Property, together with the quantity and dates of application. Licensee shall also use care in the application of chemicals to the crops grown on the Property so as to avoid damage to crops grown on adjacent parcels of land owned by third parties.

In the event Licensee uses bees to pollinate crops grown on the property, Licensee shall take all steps necessary to prevent contamination of any honey produced by said bees and shall hold TransCanada harmless from and indemnify TransCanada against any losses, claims, liabilities, penalties, or fines of whatever nature arising from the use of bees on the Property.

Licensee acknowledges that it is sophisticated in farming matters in the area of the Property, is familiar with the Property, has been provided access thereto and conducted its own study and analysis thereof, and is relying solely on that analysis in determining the suitability of the Property for Licensee's intended use. TransCanada makes no warranty, either express or implied, concerning the suitability of the soil or water for Licensee's intended use.

Any and all mineral rights in the Property are specifically excluded from this Agreement.

Licensee agrees not to use or occupy said premises for any unlawful purpose. Licensee may not assign said Agreement or any part thereof without the prior written consent of TransCanada.

Licensee is aware and acknowledges that TransCanada and other third parties operate or plan to operate energy facilities on the Property, including electric power generating stations and appurtenant facilities, buried pipelines, and above-ground electric lines. TransCanada retains the right (i) to hold and flow water against and upon the Property, by reason of the construction, maintenance, or operation of existing and future dams and hydro-electric generating facilities or any of them, which dams and facilities are presently or may in the future be located on property other than the Property, and, (ii) in connection with the construction, maintenance, or operation of such dams and facilities, to take and use the water of the Connecticut River without any restrictions whatsoever as to the quantity and times of such taking or as to the use thereof, and (iii) to interfere with and to regulate the flow of and to discharge, withhold and divert the waters of the Connecticut River, over, upon and from the Property. Licensee acknowledges and agrees that there may be damage to Licensee's crops, equipment or other facilities on the Property as a result of TransCanada's reserved rights hereunder and that Licensee shall have no claim against TransCanada for such damages. Licensee shall conduct its activities in a manner that does not interfere with TransCanada's use of the Property for power generation purposes, or with those third parties to whom TransCanada has granted rights to use the Property for such purposes. Licensee also acknowledges that its agricultural activities may be restricted or disrupted as a result of TransCanada's or its

grantees' use of the Property, and shall make no claim against TransCanada for such restrictions or disruptions.

WATER; ENVIRONMENTAL

Licensee's use of agricultural water on the property shall comply in all respects with all applicable federal, state and local laws, rules, regulations and ordinances governing or relating to the use of such water. Licensee shall pay all charges and costs for agricultural water usage.

Licensee shall allow the natural beaver activity cycle of causing periodic flooding and draining to continue uninterrupted in order to protect the Northeastern bulrush (*Scirpus ancistrochaetus*), a federally and state listed endangered species known to exist on or near the Property.

If flooding further encroaches on the agricultural portion of the field, then Licensee shall install and maintain water level control devices (aka beaver baffles) as reasonably required to prevent further flooding. Under no circumstances shall Licensee remove beaver dams to facilitate drainage of fields to allow for access and/or mowing. Licensee shall notify TransCanada and the applicable state agency(ies) (i.e., the Vermont Agency of Natural Resources and/or the New Hampshire Department of Environmental Services) before any action described in this subsection 13.3 is taken.

Licensee shall mow the inundated portion of the Property only <u>once</u> during late summer (i.e., after July 15) to serve as a buffer to the wetland and to provide ground-nesting bird habitat.

Licensee shall delay mowing of hay crop on the <u>entire</u> agricultural portion of the Property until after July 15 to protect ground-nesting bird reproduction. For crops other than hay (for example, alfalfa or soybean), delayed mowing is not required.

Licensee shall maintain a 100 foot buffer along the Connecticut River, which shall be allowed to naturally re-vegetate. In addition, Licensee shall maintain a 50 foot vegetated buffer along streams running to the Connecticut River. Technical assistance from the appropriate state agencies can be provided to establish the buffer edge location.

Licensee shall comply with all applicable federal, state, local and other laws, rules, regulations, ordinances and agency directives relating to the protection of the environment. Licensee shall be responsible for, and agrees to indemnify and hold TransCanada harmless from, any environmental claims, damages, costs, penalties, fees or fines resulting from or a breach of this Article or otherwise caused by Licensee's operations on the Property.

3. Cultural Resources

a. AIR: "We ask you to include information in your study proposal for Bellows Falls cultural resources as outlined above for the Wilder Project under B 2"

a. Response: The response to this AIR can be found in the Proposed Study Plan (PSP) (Study 33), which is being filed concurrently with this PAD deficiency/AIR response. The proposed study addresses the elements noted in this AIR. APE maps are included as Attachment E to this filing. The Bellows Falls Phase1A report described in Study Plan 33 will be eFiled as a Restricted Document due to the sensitive nature of the information in the report, with the Commission by May 15, 2013.

Vernon Hydroelectric Project

1. Recreation and Land Use

a. AIR: "Although Figure 3.10-1 [in the PAD] provides a map of the Vernon project boundary and recreation sites, it is difficult to discern the exact location of these sites with respect to one another and whether each site is located within the project boundary. Please map this area in greater detail (i.e., larger scale) including the project boundary and recreation facilities as displayed in Figure 3.10-1."

a. Response: A large-scale mapbook for the Vernon Project is included in Attachment A to this PAD deficiency response. The Vernon project boundary, project facilities, including project recreational facilities owned and managed by TransCanada are shown. GIS ESRI files (.dbf; .prj; .sbn; .sbx; .shp; .xml; and .shx) depicting the project boundary are being filed as a compressed digital file under the file name VernonFACILITY.zip.

This mapbook contains revised recreation figures showing the project recreation sites relative to the project boundary and land ownership status surrounding those sites. These figures were created to address PAD deficiency A.1.a above.

c. AIR: "Please provide any existing information and maps on land use and land classification for all lands within the project boundary, associated buffers, the authorized non-project use of project lands, and to the extent known, any lands immediately adjacent to the project boundary and within the floodplain. In addition to a general description, this information should include aerial photographs and local or regional planning agency land use classifications."

c. Response A large-scale mapbook for the Vernon Project is included in Attachment A to this PAD deficiency/AIR response. The Vernon Project land cover maps show the land cover type classifications for lands adjacent to and within the project boundary. These maps show the land cover classifications previously presented in figure 3-7.2 in the PAD at a much closer scale. GIS ESRI files (.dbf; .prj; .sbn; .sbx; .shp; .xml; and .shx) depicting the project boundary are being filed as a compressed digital file under the file name VernonLAND.zip

d. AIR: "Please provide further explanation of TransCanada's shoreline management practices including the number of permits issued, standard permit conditions, clarification of New Hampshire state requirements for minimum shoreline buffer, and any other pertinent information related to shoreline management."

d. Response: TransCanada has not entered into any agreements for non-project use of project lands within the Vernon Project. Information related to lease agreements at the Bellows Falls Project is included in the response to Bellows Falls AIR 1.d above. With regard to a clarification of New Hampshire state requirements for minimum shoreline buffers, please refer to the response to AIR d.1.d related to the Wilder Project, above.

C. STUDY REPORTS

AIR: "Throughout each of the PADs, TransCanada refers to information from numerous studies it conducted prior to submittal of the PADs. These study reports were not yet available when the PADs were filed with the Commission on October 31, 2012. Additionally, the PADs reference several other documents that are not readily available to the Commission or the public. As such, we request that you file the following study reports and reference documents with the Commission:"

Response: The following table lists the requested study reports and reference documents and status related to filing with the Commission.

Study Request Documents

	Document Citation	Status
C.1	Cherau, S. and B. O'Donnchadha. 2008. Phase IA archaeological Reconnaissance Survey, Vernon Hydroelectric Project (FERC No. 1904, Windham County, Vermont and Cheshire County, New Hampshire. Public Archaeology Laboratory, Pawtucket, RI. Submitted to TransCanada Northeast Hydro, Concord, NH.	This document is part of this filing. Attachment F
C.2	Holmes, R.D., M.T. Mulhollard, and C.D. Hertiz. 1991. Archaeological Reconnaissance Survey for the Proposed Riverbank Erosion Control Study, Massachusetts, Vermont, and New Hampshire. University of Massachusetts, Archaeological Services Report. Submitted to Northeast Utilities, Hartford, CT	This document is part of this filing. Attachment G
C.3	Hubbard, Michael, Suzanne Cherau, Jenifer Elam, John Daly, and Ora Elquist. 2012. Phase IA Archaeological Reconnaissance Survey, Wilder Hydroelectric Project (FERC No. 1892), Windsor and Orange Counties, Vermont, and Grafton County, New Hampshire. Public Archaeology Laboratory, Pawtucket,RI Submitted to TransCanada Hydro Northeast, Inc. Concord, NH.	This report is in draft and will be submitted to NH and VT SHPOs by May 15, 2013.
C.4	TransCanada and Normandeau Associates Inc. (Normandeau) water quality sampling data and reports.	Attachment H The attached draft report was submitted for agency review on February 22, 2013. To date, the only comments received were from the New Hampshire Fish and Game Department. We are still anticipating comments from NHDES. VTDEC has deferred to NHDES for comments.
		Report and NHFGD comments are in attached to this pdf. Appendix A to

	Document Citation	Status
		the report is eFiled separately as AIRC4AttachmentHBaselineWQ Data 2012AppendixA.zip Additional water quality monitoring is included in the PSP, Study Plan 6 in response to resource agency study requests.
C.5	TransCanada and Normandeau Associates Inc. (Normandeau) Jesup's milk vetch/Wilder flow and the RTE study reports.	TransCanada recently received agency comments on both reports. Those comments are being incorporated into final reports and will be filed by April 30, 2013.
C.6	In addition, during the January 29, 2013 scoping meeting, TransCanada noted that the geologic, geotechnical, seepage and stability study along the Vernon Neck had recently been completed. Please file the results of the geologic, geotechnical, seepage and stability study along the Vernon Neck study.	This was an apparent misunderstanding. This study requested by the New York Regional Office (D2SI) has not been conducted, but is scheduled to be done in spring 2013, with a report prepared by fall. The report will be filed when completed.

D. ADDITIONAL COMMENTS FOR PRELIMINARY LICENSING PROPOSAL AND LICENSE APPLICATION

Comment: "While each PAD did provide descriptions of aesthetic and visual characteristics of the respective project dam and adjacent facilities as required by § 5.6(d)(3)(ix), there were few accompanying photos. So we may perform an analysis of project effects on aesthetic resources, when submitting your PLP for each project please provide additional photograph evidence from public areas such as recreation facilities, public roadways, and designated trails of project features including the dam, appurtenant facilities, and facilities in towns and villages."

Response: TransCanada will provide photographic evidence of aesthetic and visual characteristics with the Preliminary License Proposal (PLP) or Draft License Application for each of the projects.

Attachment A

Project Mapbooks and corresponding electronic ESRI GIS shapefiles are <u>eFiled as</u> <u>separate files</u> due to file size and the corresponding file names are indicated in *italics* below

- 1. Wilder Project AttachmentAWilderMapbooksABCD.pdf
 - a. Project Boundary, TransCanada Lands, Facilities and Recreation Sites; *WilderFACILITY.zip*
 - b. Soils over topography; *WilderSOIL.zip*
 - c. Soils over aerial photos; WilderSOIL.zip
 - d. Geology; *WilderSOIL.zip*
 - e. Land Cover, Land Use; WilderLAND.zip
- 2. Bellows Falls AttachmentABellowsFallsMapbooksABCD.pdf
 - a. Project Boundary, TransCanada Lands, Facilities and Recreation Sites, *BellowsFallsFACILITY.zip*
 - b. Soils over topography; *BellowsFallsSOIL.zip*
 - c. Soils over aerial photos; *BellowsFallsSOIL.zip*
 - d. Geology; BellowsFallsSOIL.zip
 - e. Land Cover, Land Use; BellowsFallsLAND.zip
- 3. Vernon AttachmentAVernonMapBooksABCD.pdf
 - a. Project Boundary, TransCanada Lands, Facilities and Recreation Sites; *VernonFACILITY.zip*
 - b. Soils over topography; VernonSOIL.zip
 - c. Soils over aerial photos; VernonSOIL.zip
 - d. Geology; VernonSOIL.zip
 - e. Land Cover, Land Use; VernonLAND.zip

Attachment B

This attachment is <u>eFiled as a separate pdf file</u> due to file size. The corresponding file name is indicated in *italics* below

Stantec. 2013. 2012 Groundwater Monitoring Summary Report and GMP Renewal Application, Westboro Roundhouse, 26 Railroad Avenue, West Lebanon, New Hampshire, 03784, NHDES Site #: 199210036, Project Type: LAST, Project Numbers: 3990 and 13124

AttachmentBWestboroRailYard2012GWMonitoringReport.pdf

Attachment C

This attachment is <u>eFiled as a separate pdf file</u> due to file size. The corresponding file name is indicated in *italics* below

Stantec. 2012. Results of Laser Induced Fluorescence Survey, Westboro Roundhouse, 26 Railroad Avenue, West Lebanon, NH, 03784. NHDES Site #: 199210036, Project Type: LAST, Project Numbers: 3990 (Stantec, 2012)

AttachmentCWestboroRailYardIISProxy.pdf

Attachment D

This attachment is <u>eFiled as a separate pdf</u>. The corresponding file name is indicated in *italics* below

TransCanada-Stantec email correspondence regarding clarification of statements in 2012 Groundwater Monitoring Summary Report and GMP Renewal Application, Westboro Roundhouse

AttachmentDWestboroRailYardemailcommunicationStantec.pdf

Attachment E

This attachment is <u>eFiled as two separate pdf files</u> due to file size. The corresponding file names are indicated in *italics* below

Wilder APE Cultural Resources Mapbooks

AttachmentEWilderProjectPhase1AAPEmap.pdf

Bellows Falls APE Cultural Resources Mapbooks

AttachmentEBellowsFallsProjectPhase1AAPEmap.pdf

Attachment F

This attachment is <u>eFiled as a pdf files</u> due to file size. The corresponding file names are indicated in *italics* below. This is a RESTRICTED document due to the specific references to sensitive cultural and historic information.

Cherau, S. and B. O'Donnchadha. 2008. Phase IA archaeological Reconnaissance Survey, Vernon Hydroelectric Project (FERC No. 1904, Windham County, Vermont and Cheshire County, New Hampshire. Public Archaeology Laboratory, Pawtucket, RI. Submitted to TransCanada Northeast Hydro, Concord, NH.

RESTRICTEDAttachmentFVernon FinalPhaseIASurvey2008.pdf

Attachment G

This attachment is <u>eFiled as a pdf files</u> due to file size. The corresponding file names are indicated in *italics* below. This is a RESTRICTED document due to the specific references to sensitive cultural and historic information.

 Holmes, R.D., M.T. Mulhollard, and C.D. Hertiz. 1991. Archaeological Reconnaissance Survey for the Proposed Riverbank Erosion Control Study, Massachusetts, Vermont, and New Hampshire. University of Massachusetts, Archaeological Services Report. Submitted to Northeast Utilities, Hartford, CT.

RESTRICTEDAttachmentGHolmes1991UMASSArchaeologicalReconnSurvey.pdf

Attachment H

This attachment is <u>eFiled as two separate pdf files and one zipped excel</u> file due to file size. The corresponding file names are indicated in *italics* below

Normandeau Associates, Inc. 2012 Baseline Water Quality Study, Wilder Hydroelectric Project No. 1892, Bellows Falls Hydroelectric Project No. 1855, Vernon Hydroelectric Project No. 1904. Agency Draft Report. Prepared for TransCanada Hydro Northeast Inc. February 2013.

AttachmentHTransCanada Baseline WQ Study Report_Agency Draft 2-8-13.pdf

Normandeau Associates, Inc. Appendix Tables - 2012 Baseline Water Quality Study, Wilder Hydroelectric Project No. 1892, Bellows Falls Hydroelectric Project No. 1855, Vernon Hydroelectric Project No. 1904. Agency Draft Report. Prepared for TransCanada Hydro Northeast Inc. February 2013.

AttachmentHBaselineWQ Data 2012AppendixA.zip

Email correspondence between TransCanada and agencies transmitting draft pre-PAD Water Quality report and receipt of comments from G. Gries of New Hampshire Fish and Game Department.

AttachmentHEmailCommentNHFGD2012WQStudy.pdf