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**LOW IMPACT HYDROPOWER QUESTIONNAIRE**  
APPLICATION REVISED JANUARY 16, 2012

Excerpted from Part VI, Section E of the Low Impact Hydropower Certification Program. This Questionnaire must be completed based upon the Line-By-Line instructions available in Chapter VI, Section D of the program, available on-line in Word format at <http://www.lowimpacthydro.org>. PLEASE SUBMIT THIS QUESTIONNAIRE IN WORD FORMAT.

**E. LOW IMPACT HYDROPOWER QUESTIONNAIRE**

<b>Background Information</b>	
1) Name of the Facility as used in the FERC license/exemption.	Silver Lake Hydroelectric Project (P- 11478)

<p>2) Applicant's name, contact information and relationship to the Facility. If the Applicant is not the Facility owner/operator, also provide the name and contact information for the Facility owner and operator.</p>	<p>Beth Eliason, P.E.  Central Vermont Public Service Corporation  77 Grove Street  Rutland, VT 05701  beliaso@cvps.com  802-747-5594</p> <p>Applicant Representative:  Maryalice Fischer  Normandeau Associates, Inc.  <a href="mailto:mfischer@normandeau.com">mfischer@normandeau.com</a>  603-664-5097</p>															
<p>3) Location of Facility including (a) the state in which Facility is located; (b) the river on which Facility is located; (c) the river-mile location of the Facility dam; (d) the Facility's location relative to other dams on the river upstream and downstream of the Facility, and (e) the exact longitude and latitude of the Facility dam.</p>	<p>a) The Silver Lake Project is located in Goshen, Liecester and Salisbury VT</p> <p>b) Sucker Brook</p> <p>c) RM of the powerhouse: 0.25 miles</p> <p>d) The CVPS Salisbury Project (not FERC-licensed) is located on the Leicester River approximately one mile downstream of the outlet of Lake Dunmore.</p> <p>The drainage area at the project is 10.2 square miles.</p> <p>e)</p> <table border="1"> <thead> <tr> <th>Development</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>Center of Goshen Dam</td> <td>43.9146</td> <td>-73.0037</td> </tr> <tr> <td>Diversion Dam spillway</td> <td>43.9029</td> <td>-73.0404</td> </tr> <tr> <td>Center of Silver Lake Dam</td> <td>43.8986</td> <td>-73.0531</td> </tr> <tr> <td>Silver Lake Powerhouse</td> <td>43.9043</td> <td>-73.0665</td> </tr> </tbody> </table> <p>Map in jpeg attached.</p>	Development	Latitude	Longitude	Center of Goshen Dam	43.9146	-73.0037	Diversion Dam spillway	43.9029	-73.0404	Center of Silver Lake Dam	43.8986	-73.0531	Silver Lake Powerhouse	43.9043	-73.0665
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4) Installed capacity.	2.2 MW Licensed Capacity												
5) Average annual generation.	6,309 MWH 10-year average												
6) Regulatory status.	Project No. 11478, FERC original license was issued on 02/26/2009 for a 30-year term.  See Attachment A. There have been no regulatory proceedings or compliance issues since the license.												
7) Reservoir volume and surface area measured at the normal maximum operating level.	<table border="1"> <thead> <tr> <th>Facility</th> <th>Reservoir Volume (acre-feet)</th> <th>Surface Area (acres)</th> </tr> </thead> <tbody> <tr> <td>Sugar Hill</td> <td>1200</td> <td>64</td> </tr> <tr> <td>Sucker Brook Diversion</td> <td>1</td> <td>0.25</td> </tr> <tr> <td>Silver Lake</td> <td>3120</td> <td>110</td> </tr> </tbody> </table>	Facility	Reservoir Volume (acre-feet)	Surface Area (acres)	Sugar Hill	1200	64	Sucker Brook Diversion	1	0.25	Silver Lake	3120	110
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8) Area occupied by non-reservoir facilities ( <i>e.g.</i> , dam, penstocks, powerhouse).	4.3												
9) Number of acres inundated by the Facility.	Not available/ information not required.												
10) Number of acres contained in a 200-foot zone extending around entire reservoir.	<table border="1"> <thead> <tr> <th>Facility</th> <th>Acres within 200' of Reservoir</th> </tr> </thead> <tbody> <tr> <td>Sugar Hill</td> <td>49 acres</td> </tr> <tr> <td>Sucker Brook Diversion</td> <td>4.3</td> </tr> <tr> <td>Silver Lake</td> <td>58 acres</td> </tr> </tbody> </table>	Facility	Acres within 200' of Reservoir	Sugar Hill	49 acres	Sucker Brook Diversion	4.3	Silver Lake	58 acres				
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11) Contacts for Resource Agencies and non-governmental organizations	See Attachment B - revised												

<p>12) Description of the Facility, its mode of operation (<i>i.e.</i>, peaking/run of river) and photographs, maps and diagrams.</p>	<p>Seasonal storage/peaking facility</p> <p>Summary of the facility, photos, and maps/diagrams are included in Attachment C, and in attached map.</p>
<p><b>Questions for “New” Facilities Only:</b></p> <p>If the Facility you are applying for is “new” (<i>i.e.</i>, an existing dam that added or increased power generation capacity after August of 1998) please answer the following questions to determine eligibility for the program</p>	<p>N/A</p>
<p>13) When was the dam associated with the Facility completed?</p>	
<p>14) When did the added or increased generation first generate electricity? If the added or increased generation is not yet operational, please answer question 18 as well.</p>	
<p>15) Did the added or increased power generation capacity require or include any new dam or other diversion structure?</p>	
<p>16) Did the added or increased capacity include or require a change in water flow through the facility that worsened conditions for fish, wildlife, or water quality (for example, did operations change from run-of-river to peaking)?</p>	

<p>17 (a) Was the existing dam recommended for removal or decommissioning by resource agencies, or recommended for removal or decommissioning by a broad representation of interested persons and organizations in the local and/or regional community prior to the added or increased capacity?</p> <p>(b) If you answered “yes” to question 17(a), the Facility is not eligible for certification, unless you can show that the added or increased capacity resulted in specific measures to improve fish, wildlife, or water quality protection at the existing dam. If such measures were a result, please explain.</p>		
<p>18 (a) If the added or increased generation is not yet operational, has the increased or added generation received regulatory authorization (e.g., approval by the Federal Energy Regulatory Commission)? If not, the facility is not eligible for consideration; and</p> <p>(b) Are there any pending appeals or litigation regarding that authorization? If so, the facility is not eligible for consideration.</p>		
<b>A. Flows</b>	<b>PASS</b>	<b>FAIL</b>
<p>1) Is the Facility in <i>Compliance</i> with <i>Resource Agency Recommendations</i> issued after December 31, 1986 regarding flow conditions for fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow variations) for both the reach below the tailrace and all bypassed reaches?</p>	<p>YES – A variety of flow and reservoir conditions were included in the License and Water Quality Certification in Attachment A. See also Attachment D for a summary.</p> <p>Agency letter requested</p> <p><b>YES = Pass, Go to B</b> N/A = Go to A2</p>	<p>NO = Fail</p>
<p>2) If there is no flow condition recommended by any Resource Agency for the Facility, or if the recommendation was issued prior to January 1, 1987, is the Facility in Compliance with a flow release schedule, both below the tailrace and in all bypassed reaches, that at a minimum meets Aquatic Base Flow standards or “good” habitat flow standards calculated using the Montana-Tennant method?</p>	<p>YES = Pass, go to B NO = Go to A3</p>	

3) If the Facility is unable to meet the flow standards in A.2., has the Applicant demonstrated, and obtained a letter from the relevant Resource Agency confirming that demonstration, that the flow conditions at the Facility are appropriately protective of fish, wildlife, and water quality?	YES = Pass, go to B	NO = Fail
<b>B. Water Quality</b>	PASS	FAIL
1) Is the Facility either:  a) In Compliance with all conditions issued pursuant to a Clean Water Act Section 401 water quality certification issued for the Facility after December 31, 1986? Or  b) In Compliance with the quantitative water quality standards established by the state that support designated uses pursuant to the federal Clean Water Act in the Facility area and in the downstream reach?	a) YES – See Attachment D. The Water Quality Certification is included in Attachment A.  Agency letter requested  <b>YES = Go to B2</b>	NO = Fail
2) Is the Facility area or the downstream reach currently identified by the state as not meeting water quality standards (including narrative and numeric criteria and designated uses) pursuant to Section 303(d) of the Clean Water Act?	NO - The attached excerpt from the 2010 VT Water Quality report identifies the Leicester River below Lake Dunmore as altered, but not impaired, by regulated flows from a non-FERC licensed facility located downstream of this project. Lake Dunmore is altered, but not impaired, by both this project and the downstream non-licensed facility and the local lake association has a water level agreement with CVPS for both this project and the downstream non-FERC licensed project to manage water levels.  YES = Go to B3 <b>NO = Pass</b>	
3) If the answer to question B.2 is yes, has there been a determination that the Facility does not cause, or contribute to, the violation?	YES = Pass	NO = Fail

<b>C. Fish Passage and Protection</b>	PASS	FAIL
1) Is the Facility in Compliance with <i>Mandatory Fish Passage Prescriptions</i> for upstream and downstream passage of anadromous and catadromous fish issued by Resource Agencies after December 31, 1986?	<p>N/A - There is no federal mandatory prescription for the passage of anadromous and catadromous fish within the Project.</p> <p>YES = Go to C5  <b>N/A = Go to C2</b></p>	NO = Fail

<p>2) Are there historic records of anadromous and/or catadromous fish movement through the Facility area, but anadromous and/or catadromous fish do not presently move through the Facility area (<i>e.g.</i>, because passage is blocked at a downstream dam or the fish no longer have a migratory run)?</p> <p>a) If the fish are extinct or extirpated from the Facility area or downstream reach, has the Applicant demonstrated that the extinction or extirpation was not due in whole or part to the Facility?</p> <p>b) If a Resource Agency Recommended adoption of upstream and/or downstream fish passage measures at a specific future date, or when a triggering event occurs (such as completion of passage through a downstream obstruction or the completion of a specified process), has the Facility owner/operator made a legally enforceable commitment to provide such passage?</p>	<p>NO - There is no mention in the Environmental Assessment (attached) of the current or historical presence of anadromous or catadromous fish in the project area. Nor was the 04/19/1996 letter from DOI to FERC (mentioned in the EA), found after much searching; however, a VANR comment letter on the same date is attached (the EA may have intended this letter).</p> <p>Since the EA, the license and the WQC all fail to discuss migratory species, it should be clear that these are not species of concern within the project area. In addition, a downstream unlicensed dam exists, and would effectively preclude migratory species from upstream access to this project.</p> <p>YES = Go to C2a  <b>NO = Go to C3</b></p> <p>YES = Go to C2b  N/A = Go to C2b</p> <p>YES = Go to C5  N/A = Go to C3</p>	<p>NO = Fail</p> <p>NO = Fail</p>
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<p>3) If, since December 31, 1986:</p> <p>a) Resource Agencies have had the opportunity to issue, and considered issuing, a Mandatory Fish Passage Prescription for upstream and/or downstream passage of anadromous or catadromous fish (including delayed installation as described in C2a above), and</p> <p>b) The Resource Agencies declined to issue a Mandatory Fish Passage Prescription,</p> <p>c) Was a reason for the Resource Agencies' declining to issue a Mandatory Fish Passage Prescription one of the following: (1) the technological infeasibility of passage, (2) the absence of habitat upstream of the Facility due at least in part to inundation by the Facility impoundment, or (3) the anadromous or catadromous fish are no longer present in the Facility area and/or downstream reach due in whole or part to the presence of the Facility?</p>	<p>N/A - See Question C.2 above – the only information in the EA related to fishway prescriptions (p. 20), states “Interior did not make any recommendations pursuant to Section 18 of the FPA.” Therefore, the response to this question remains N/A and does not change responses to other questions in this section.</p> <p>NO = Go to C5  <b>N/A = Go to C4</b></p>	<p>YES = Fail</p>
<p>4) If C3 was not applicable:</p> <p>a) Are upstream and downstream fish passage survival rates for anadromous and catadromous fish at the dam each documented at greater than 95% over 80% of the run using a generally accepted monitoring methodology? Or</p> <p>b) If the Facility is unable to meet the fish passage standards in 4.a, has the Applicant either i) demonstrated, and obtained a letter from the U.S. Fish and Wildlife Service or National Marine Fisheries Service confirming that demonstration, that the upstream and downstream fish passage measures (if any) at the Facility are appropriately protective of the fishery resource, or ii) committed to the provision of fish passage measures in the future and obtained a letter from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service indicating that passage measures are not currently warranted?</p>	<p>N/A</p> <p>YES = Go to C5  <b>N/A = Go to C6</b></p>	<p>NO = Fail</p>

5) Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream and/or downstream passage of <i>Riverine</i> fish?	N/A - There is no federal mandatory prescription for the passage of riverine fish within the Project.  YES = Go to C6 <b>N/A = Go to C6</b>	NO = Fail
6) Is the Facility in Compliance with Resource Agency Recommendations for Riverine, anadromous and catadromous fish entrainment protection, such as tailrace barriers?	YES – In accordance with Article 401 of the License and Condition J of the WQC, the facility maintains a fish exclusion screen at the lower end of the station tailrace to prevent fish from ascending the tailrace and becoming stranded. In addition, when the Silver Lake trashrack was replaced it has a bar clear spacing of 1.5 inch for protection.  <b>YES = Pass, go to D</b> N/A = Pass, go to D	NO = Fail
<b>D. Watershed Protection</b>	PASS	FAIL
1 ) Is there a buffer zone dedicated for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low-impact recreation) extending 200 feet from the normal maximum reservoir level of the reservoir for at least 50% of the shoreline, including all of the undeveloped shoreline?	NO  YES = Pass, go to E and receive 3 extra years of certification	NO  <b>NO = go to D2</b>
2 ) Has the Facility owner/operator established an approved watershed enhancement fund that: 1) could achieve within the project’s watershed the ecological and recreational equivalent of land protection in D.1, and 2) has the agreement of appropriate stakeholders and state and federal resource agencies?	NO - As described in the application Attachment D, a watershed enhancement fund was created to protect the entire Lake Champlain Basin, not only the sub-watershed in which the project is located, and therefore does not provide equivalent protection to the project area itself.  YES = Pass, go to E and receive 3 extra years of certification	<b>NO = go to D3</b>

3 ) Has the Facility owner/operator established through a settlement agreement with appropriate stakeholders, with state and federal resource agencies agreement, an appropriate shoreland buffer or equivalent watershed land protection plan for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low impact recreation)?	YES = Pass, go to E	NO  <b>NO = go to D4</b>
4 ) Is the facility in compliance with both state and federal resource agencies recommendations in a license approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the project?	N/A  YES = Pass, go to E <b>N/A = Pass go to E</b>	No = Fail
<b>E. Threatened and Endangered Species Protection</b>	PASS	FAIL
1) Are threatened or endangered species listed under state or federal Endangered Species Acts present in the Facility area and/or downstream reach?	YES – See Attachment D.  <b>YES = Go to E2</b> NO = Pass, go to F	
2) If a recovery plan has been adopted for the threatened or endangered species pursuant to Section 4(f) of the Endangered Species Act or similar state provision, is the Facility in Compliance with all recommendations in the plan relevant to the Facility?	Yes –See Attachment D.  Copies of recovery plans for Indiana bat and bald eagle and related documentation are attached.  Agency letter requested  <b>YES = Go to E3</b> N/A = Go to E3	NO = Fail
3) If the Facility has received authorization to incidentally <i>Take</i> a listed species through: (i) Having a relevant agency complete consultation pursuant to ESA Section 7 resulting in a biological opinion, a habitat recovery plan, and/or (if needed) an incidental Take statement; (ii) Obtaining an incidental Take permit pursuant to ESA Section 10; or (iii) For species listed by a state and not by the federal government, obtaining authorization pursuant to similar state procedures; is the Facility in Compliance with conditions pursuant to that authorization?	N/A  YES = Go to E4 <b>N/A = Go to E5</b>	NO = Fail

<p>4) If a biological opinion applicable to the Facility for the threatened or endangered species has been issued, can the Applicant demonstrate that:</p> <p>a) The biological opinion was accompanied by a FERC license or exemption or a habitat conservation plan? Or</p> <p>b) The biological opinion was issued pursuant to or consistent with a recovery plan for the endangered or threatened species? Or</p> <p>c) There is no recovery plan for the threatened or endangered species under active development by the relevant Resource Agency? Or</p> <p>d) The recovery plan under active development will have no material effect on the Facility's operations?</p>	<p>d) YES - The FWS consultation on Indiana bat (12/28/08, attached) concurs with the 2008 FERC Biological Assessment for the species. An earlier letter (06/11/2002, attached) also reported that bald eagles may appear only as transients.</p> <p><b>YES = Pass, go to F</b></p>	<p>NO = Fail</p>
<p>5) If E.2 and E.3 are not applicable, has the Applicant demonstrated that the Facility and Facility operations do not negatively affect listed species?</p>	<p>YES = Pass, go to F</p>	<p>NO = Fail</p>
<p><b>F. Cultural Resource Protection</b></p>	<p>PASS</p>	<p>FAIL</p>
<p>1) If FERC-regulated, is the Facility in Compliance with all requirements regarding Cultural Resource protection, mitigation or enhancement included in the FERC license or exemption?</p>	<p>YES – Article 406 of the License stipulates requirements. See Attachment D.</p> <p>Agency letter requested</p> <p><b>YES = Pass, go to G</b> N/A = Go to F2</p>	<p>NO = Fail</p>
<p>2) If not FERC-regulated, does the Facility owner/operator have in place (and is in Compliance with) a plan for the protection, mitigation or enhancement of impacts to Cultural Resources approved by the relevant state or federal agency or <i>Native American Tribe</i>, or a letter from a senior officer of the relevant agency or Tribe that no plan is needed because Cultural Resources are not negatively affected by the Facility?</p>	<p>YES = Pass, go to G</p>	<p>NO = Fail</p>
<p><b>G. Recreation</b></p>	<p>PASS</p>	<p>FAIL</p>

<p>1) If FERC-regulated, is the Facility in Compliance with the recreational access, accommodation (including recreational flow releases) and facilities conditions in its FERC license or exemption?</p>	<p>YES – Articles 401 and 407 of the License, and Conditions O and P of the WQC stipulate requirements. See Attachment D.</p> <p>On September 29, 2011, FERC approved with modifications (attached), the August 22, 2011 redesign of the project’s handicap fishing access. Construction of that facility was substantially completed in 2011 in consultation with VANR – updated communications documentation is attached.</p> <p>Agency letter requested</p> <p><b>YES = Go to G3</b>  <b>N/A = Go to G2</b></p>	<p>NO = Fail</p>
<p>2) If not FERC-regulated, does the Facility provide recreational access, accommodation (including recreational flow releases) and facilities, as Recommended by Resource Agencies or other agencies responsible for recreation?</p>	<p>YES = Go to G3</p>	<p>NO = Fail</p>
<p>3) Does the Facility allow access to the reservoir and downstream reaches without fees or charges?</p>	<p>YES - The certification letter submitted with the application and signed by a corporate officer, attests that all information in the application is true and complete. This necessarily includes the response of YES to this question in the application.</p> <p><b>YES = Pass, go to H</b></p>	<p>NO = Fail</p>
<p><b>H. Facilities Recommended for Removal</b></p>		
<p>1) Is there a Resource Agency Recommendation for removal of the dam associated with the Facility?</p>	<p>PASS</p> <p>NO – There are no Resource Agency Recommendations for removal of any dams associated with the Project.</p> <p><b>NO = Pass, Facility is Low Impact</b></p>	<p>FAIL</p> <p>YES = Fail</p>