Town of Hinesburg, Vermont
Application form for Town Commission, Board, and Committee Appointments

Please supply answers to the following. The Town will provide access to a computer and printer for any applicant for the purpose of completing this form.

Name of Applicant: Raymond Keller **Date: 1 Oct 2013**

Mailing Address: 161 Thistle Hill Dr., Hinesburg

Phone Number: 802-338-1587 **E-mail Address:** RKeller532@gmail.com

Name of Commission, Board, or Committee: Energy Committee

Hinesburg Resident: Y / N (circle one)

Hinesburg Resident for how long? 13 yrs / NA

1) Review the Mission Statement of the Commission, Board, or Committee you are applying to serve on and explain how you will aid the group achieve said Mission. I've spent the past 23 years as an engineer predominately in the energy and water conservation field. This experience speaks directly to the need promote the wise use of energy and for education. I spend a considerable amount of time reaching out and helping people understand what is reasonable and makes sense to pursue with the limited budgets they have. Reducing the energy use of a building is the most cost effective first step before applying renewable energy solutions.

2) Please share your thoughts about implementation of at least two of the Top Priority Goals and Recommendations in the latest Town Plan (Section 9, page 75), as it relates to the Commission, Board, or Commission on which you are applying to serve. The Energy Committee can speak directly to affordable housing by reduction in household operating expenses and the attendant impact to the utility systems serving them. Also, the committee can impact sustainable economic development by encouraging cost effective use of resources and promoting best practices for businesses.

3) Review the scheduled meeting day/time of the Commission, Board, or Committee along with the length of the term of the position. Will you be able to regularly make the meetings?: (Y) / N Will you be able to serve for the term of the position? (Y) / N

4) Please introduce yourself to the Selectboard by providing a short cover letter and/or a resume. Resume is attached.

RAYMOND M. KELLER, PE, CEM, LEED AP
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PROFESSIONAL EXPERIENCE:

RMK CONSULTANTS, LLC – 2012 - Present **HINESBURG, VT.**

Principal

Primary position responsible for the delivery of energy efficiency services and advice to commercial and industrial clientele. This position provides guidance to reduce client energy and resource use and ultimately their operating expenses.

- Performed parametric studies for alternative chiller plant technologies such as gas and steam fired equipment along with examining Ice storage technologies.
- Examined and quantified the expansion and optimization of the 3,500 Ton cooling tower project.
- Performed an engineering study examining the benefits and challenges of integrating a 2.8 MW fuel cell plant into existing Hospital infrastructure.
- Helped to determine the source of high gas usage problem and quantified the savings on a retrofit high efficiency burner and burner controls for a 600 Hp steam boiler.
- Provided training for owner's representatives regarding how to read and interpret energy bills and the impact of tariff structures on facility costs with emphasis on improving energy saving project economics.
- Consulting with Vermont Energy Investment Corporation Washington DC Sustainability Energy Utility. Work involves developing and quantifying gas saving measures for commercial, institutional and industrial clientele.

VERMONT GAS SYSTEMS, INC. – 2006 - Present **SOUTH BURLINGTON, VT.**

Energy Services Engineer, Commercial/Industrial Group

Key position responsible for the delivery of natural gas energy efficiency projects and services to commercial and industrial clientele for one forth of the state of Vermont. Vermont Gas manages Vermont's single natural gas utility. This position provides guidance and incentives to reduce client fuel use and ultimately operating expenses.

- Perform building energy audits, analyze fuel and utility bills, recommendations report and an incentive contract for the customer.
- Review energy efficiency measures for compliance with program standards.
- Collaborate with owners and designers to justify and employ high efficiency equipment alternatives.
- Identify and analyze gas market expansion opportunities where cost effective, including researching new technology opportunities to meet the customer needs of cost effectivity and productivity.
- **Employed energy modeling techniques (Trane Trace & System Analyzer, Energy 10, EQuest and DOE software programs) as well as develop and maintain custom spreadsheets for gas savings.**
- Conduct training for local ASHRAE, and Consortium of Energy and Efficiency on gas efficient technologies. Active member of CEE's Boilers, Commercial Kitchens and Gas HVAC committees.
- Chaired the Vermont Thermal Efficiency Task Force, Commercial/Industrial sub-committee. State initiative to residential and commercial building energy efficiency by 25% before the year 2020.
- Participant in the 2010 Vermont Commercial Building Energy Code Technical Advisory Panel.
- Provide customer service information to Commercial/Industrial clients and the engineering community for various requests including correcting usage and tariff information, service requirements, high efficiency equipment direction and HVAC system improvements.

Project Highlights:

- Exceeded program saving and cost goals for the past four years, even in a down economy.
- Promoted the successful installation of condensing and hybrid boiler plant technology for several schools and the Vermont Military resulting in gas savings typically greater than 15%/year.
- Expansion of the commercial kitchens program to include all Energy Star listed equipment.
- Successfully helping large industrial customers leverage the DOE's Industrial Audit Program.

BREAD LOAF CORPORATION – 2003 - 2006 **MIDDLEBURY, VT.**

Manager of MEP Services,

Central position responsible for the project management of the mechanical, plumbing, fire protection and electrical (MEPFP) systems of building construction projects.

- Collaborate with architectural, estimation and construction team members on building design, and construction methods for project delivery. Steward the design to meet the client's program needs for reliability, timeliness, and operational efficiency while staying within the budget.
- Create and issue RFP's, bid packages or negotiate MEP/FP work. Hire professional engineering firms. Analyze bids and/or pricing on MEPFP work. Issue and administer MEPFP subcontractors' agreements.
- Review Mechanical, Electrical, Plumbing and Fire Protection submittals for conformance with contract documents. Inspect project sites to monitor progress, quality and workmanship.
- Participate in punch list generation and resolution along with start up/turnover/commissioning procedures including O&M manual and record drawing reviews.
- Perform building energy modeling and life cycle cost analysis to project the lowest life cycle cost design approach for client facilities. Maximize utility energy efficiency incentives for client projects.
- Projects include: $11 million Landmark College (Honorable Mention at the 2006 *Efficiency Vermont* Design Competition for Energy Efficiency), St. Michaels College Alliot Hall, Okemo Mountain Resort, New England Tropical Conservancy conceptual membrane structure design.

VERMONT ENERGY INVESTMENT CORPORATION – 2000 - 2002 **BURLINGTON, VT.**

Senior Project Manager, Commercial/Industrial Group

Key position responsible for the delivery of energy efficiency projects and services to commercial and industrial clientele throughout the state of Vermont. VEIC manages Vermont's efficiency utility, which provides guidance and incentives to reduce client-operating expenses.

- Conduct building energy audits, analyze fuel and utility bills, provide comprehensive recommendations report and an incentive contract for the customer.
- Evaluate energy efficiency measures for compliance with program standards.
- Work with owners and designers to justify and employ high efficiency equipment alternatives.
- Managing a staff of five energy project management professionals.
- Maintaining communication with contractors and coordinate work in accordance with project schedule.
- Attended ®, Osram Sylvaina's LIGHTPOINT Institute for Lighting Technology course.
- **Employed energy modeling techniques (Trane Trace & System Analyzer, Energy 10, EQuest and Visual Lighting software programs) as well as custom spreadsheets .**

Project Highlights:

- Ethan Allen Furniture, Orleans & Island Pond Plants, VT. Installation of VFD's, high efficiency motors (total of 270 Hp.) and replacement of undersized and low efficiency transformers (1,500 kVA).
- Eveready Battery Company, Bennington, VT. Installation of high efficiency electric injection molding machine equipment. Performed energy analysis of sequencing of a multiple air compressor plant.
- Husky Hot Runner, Milton, VT. Calculated energy cost saving by converting ten CAV air handlers to VAV using CO_2 based demand control ventilation for ventilation air conditioning saving.
- Missisquoi National Wildlife Visitor Center, Swanton, VT. Proposed new wildlife visitor center and energy conservation showcase facility. Energy model alternatives were examined such as water source heat pumps, Variable Air Volume DX cooling, and direct ground water cooling.
- US Tsubaki Inc., Bennington, VT. Trained in-house personnel on how to use a leak detector and conduct a compressed air system audit.

EDUCATION & PROFESSIONAL REGISTRATION:

Drexel University, Philadelphia, PA Bachelor of Science in Mechanical Engineering,

Registered Professional Engineer in Vermont and Maine

Certified Energy Manager & ***Certified Green Building Engineer*** by the Association of Energy Engineers

LEED Accredited Professional by the US Green Building Council