EB-2004-0524

524

November 30, 2004

Mr. Howard Weston, Board Chair
Mr. John Zych, Board Secretary
Ontario Energy Board
P.O. Box 2319, 26th floor
2300 Yonge Street
Toronto, ON N4P 1E4

By Courier and Fax (416.440.7656)

RE: application for approval of Conservation and Demand Management (PF-2004-0203) from Brant County Power Inc.

Dear Sirs: 10/1/12

Brant County Power is requesting approval of our Conservation and Demand Management (C&DM) plan. We represent approximately 9000 customers and our investment is $314.802.00. Our initiative supports the clear objective put forth by the government to create a 'conservation culture' in our service area to correspond with other LDC's. Please find our plan enclosed.

Brant County Power Inc. is also a member of the NEPPA Group. The following LDC's are included in this group: Canadian Niagara Power, Grimsby Power Inc., Haldimand County Hydro Inc., Niagara Falls hydro Inc., Niagara-on-the-Lake Hydro Inc., Norfolk Power Distribution Inc., Peninsula West Utilities Limited, St. Catharines Hydro Utility Services Inc., Welland Hydro-Electric System Corp., and Brantford Power Inc.

In July 2004, the NEPPA members created a C&DM steering committee to investigate and develop an action plan in response to the Minister of Energy's directive. As part of this committee we will continue to explore joint ventures to maximize efforts, improve customer communications, joint training and leverage our combined cooperation to create cost effective solutions.

We are confident that our application meets the requirements set out in the Boards RP-2004-0203 Procedural Order of October 5, 2004. Please contact me or Wendy Robinson of our office if you have any questions.

Regards

Deborah Sleeth
CEO
Brant County Power Inc.

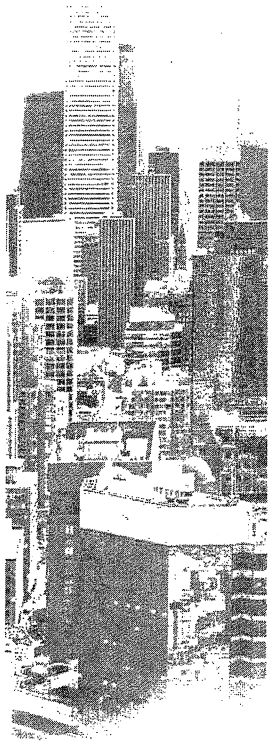
65 Dundas St. E., Paris ON N3L 3H1
519 442.2215
1.877.871.2215

INDECO

17 December 2004

John Zych
Board Secretary
Ontario Energy Board
2300 Yonge Street, 26th Floor
Toronto, ON M4P 1E4

File 19
EB-2004-0524



Dear sir,

Re: Brant County Power 2004-2005 Plan
Board file 2004-0203

I am a consultant to Brant County Power Inc. for their CDM plan, and am writing on their behalf.

In conversation with Board staff, a question came up about the BCPI program budgets listed on Table 2, p.13 of the Brant County Power 2004-2005 CDM Plan and we would like to submit this supplementary information to clarify these data.

The program costs in Table 2 add up to more than $314,802, as these costs are estimates which will be refined as the programs are further developed and implemented. Brant County Power is seeking approval for spending of $314,802 on the CDM programs, this being the amount of money associated with its third tranche.

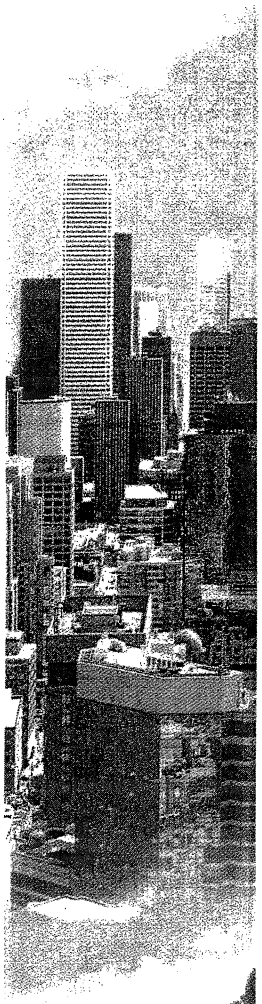
Please feel free to contact Wendy Robinson, Manager of Customer Service, at 519-442-3363 x726 should you have any additional questions about this matter, or other matters relating to the Brant County Power Inc. plan.

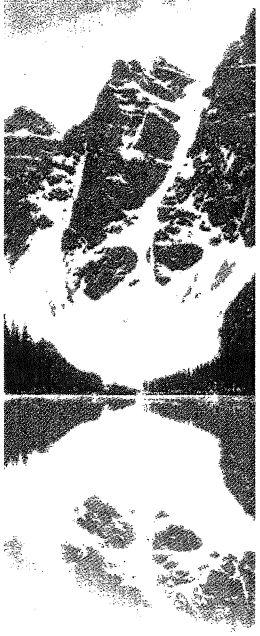
Sincerely,

David W. Heeney

David Heeney
President
416 532-4333 x 103
dheeney@indeco.com

cc: Stephen McComb, OEB
Wendy Robinson, Brant County Power Inc.

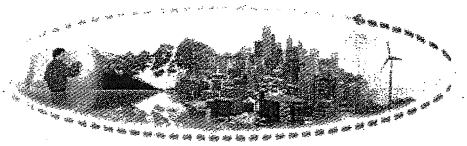




2004-2005 CDM Plan

INDECO & BRANT County Power Inc. your community owned hydro

Brant County Power Inc. 2004-2005
Conservation and Demand Management Plan



INDECO

BRANT County Power Inc.
your community-owned hydro

Contents

1 Introduction

Brant County Power Inc. (BCPI) is a local distribution company serving 8843 customers – 7297 of which are residential and 1546 which are general service – in the County of Brant, Ontario.

BCPI's mission statement includes the following corporate objectives:

- Utilizing the individual strengths of our people with a unified commitment to continually improve and maximize efficiencies, cost effectiveness and reliability.
- Understanding our customers' concerns, maintaining respect for the individual.
- Implementing solutions using judgement with integrity, never compromising dependable business ethics.
- Recognizing and promoting health and safety, with due regard for the environment.
- Professionally respond to the requirements of the system with a sense of urgency but never compromising our safety or that of the general public.
- Courteously address the needs of our clients.
- Enhance and preserve shareholder and community value.
- Foster co-operation, respecting the health and safety of those around us, while encouraging creativity and progressive activity within our work environment.

The Conservation and Demand Management (CDM) activities described herein are consistent with all of BCPI's corporate objectives. The CDM plan directly supports BCPI's commitment to continually improve and maximize efficiencies, cost effectiveness and reliability.

1.1 Principles

BCPI's Conservation and Demand Management (CDM) plan is guided by the following principles:

- The CDM plan should support the provincial goal of establishing a 'culture of conservation'.

- The CDM plan should include distribution system improvements, LDC 'in-house' energy efficiency projects, as well as programs for all customer classes.

- CDM programs should build on existing programs and partnerships, where possible.

- The number and type of programs contained in the CDM plan should reflect the size of the BCPI's third tranche, and the unique characteristics of the County of Brant.

Culture of conservation

The Province of Ontario has announced its commitment to building a culture of conservation in Ontario. As part of this process, the province has set a number of energy related targets, including:

- Reducing provincial peak electricity demand by 5% by 2007

- Reducing electricity use in government owned buildings by 10%

- Phasing-out coal-fired generation by 2007

- Increasing the capacity of renewable energy to 5% of total electricity capacity by 2007, 10% by 2010

BCPI is committed to promoting a 'culture of conservation' through its CDM activities, thereby helping the province to work toward these goals.

Mix of assets and programs

The CDM plan should include distribution system improvements, LDC 'in-house' energy efficiency projects, as well as programs for all customer classes. This mix of assets and programs will help to ensure that electricity is used wisely by both BCPI and its customers.

Improving the efficiency of the distribution system and the LDC's internal operations, through the acquisition of conservation assets, will provide benefits to all of the LDC's customers. BCPI's 'Conservation County' program will provide all of its customers with information and resources

to help them reduce their own energy demand and increase their energy efficiency.

Existing programs and partnerships

CDM programs should build upon existing initiatives and partnerships and leverage additional funding, where possible and appropriate. BCPI has limited in-house expertise or resources to develop and implement all of its CDM programs on its own. BCPI intends to pursue opportunities for collaboration with neighbouring local distribution companies (e.g. Brantford Power, Woodstock Hydro) as well as with its fellow members of the Niagara Erie Public Power Alliance (NEPPA)[1]. BCPI is also an active partner in the Share the Warmth program – a charitable organization that purchases heat, energy and water on behalf of families, seniors, terminally ill and disabled persons living at or near the poverty level.

Brant Count Power will partner with the County of Brant on the development and delivery of the Conservation County program. As part of this program, opportunities to partner and build upon existing federal and provincial energy efficiency programs, such as NRCan's Energy Innovators Initiative, will be explored.

Reflect the scale and needs of the County of Brant

The number and type of CDM programs included in a CDM plan should reflect the total funding available – i.e. the size of the LDC's third tranche. BCPI's third tranche is $314,802. Approximately $82,000 of this will be dedicated to O&M programs for BCPI's customers. Given this relatively small budget for programs, compared to some of the larger LDCs with CDM budgets in excess of a million dollars, it is reasonable that only one customer-focused program – Conservation County – be developed by BCPI. This program will be accessible to all of the LDC's customers, but will be of a size and scope that is manageable by the LDC and reasonable given the budget available.

The plan should also reflect the specific scale and needs of the County of Brant, as a county with unique towns and villages, rural areas, and a strong sense of community.

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[1] NEPPA is a coalition of eleven local distribution companies. Its members are: BCPI, Brantford Power, Fortis Ontario, Grimsby Power, Haldimand County Power, Niagara Falls Hydro, Niagara-on-the-Lake Hydro, Norfolk Power, Peninsula West Utilities, St. Catharines Hydro Utility Services and Welland Hydro.

1.2 Components of the plan

BCPI has identified a number of programs that will make up its CDM portfolio. These programs include two types of expenditures – conservation assets and O&M. The distribution system improvements and in-house programs described in Chapter 2, are primarily conservation asset investments. The programs described in chapters 3 and 4 are O&M programs.

The costs provided in this plan are estimates. As such, it may be necessary to shift dollars between programs as the CDM plan is fully developed and implemented. While the allocation of dollars among programs may change, it is anticipated that the balance of spending between conservation assets and O&M will remain the same.

2 System improvements and 'house in order'

BCPI has identified a number of conservation asset expenditures and supporting programs that will increase the energy efficiency of its distribution system and/or its own operations.

2.1 *Distribution system improvements*

Consistent with its corporate mission statement, BCPI is committed to increasing the efficiency of its distribution system. It has identified a number of distribution system improvement opportunities for 2005, including: voltage conversions, a power system optimization study and installation of high efficiency transformers. Upgrading the voltage in older areas from 8kV to the current practice of 27.6kV and installing high efficiency transformers would both reduce line losses and increase efficiency of the system. The power system optimization study will ascertain where load shifting can occur within the grid to improve system efficiency including the location of optimized 'open points'.

BCPI will further investigate these opportunities in order to place a priority on the most cost effective projects that would optimize savings and overall benefits to its distribution system. The budget allocation for this program is $125,000.

2.2 *Smart meter pilot*

BCPI is exploring opportunities for a pilot study of smart meter technology. The pilot will include about 100 homes in its service area.

One of the smart meter technologies already identified by BCPI as a potentially appropriate technology for its customers is the pay-as-you-go meter. Other options will be investigated as required. Any smart meter pilot that is implemented will be consistent with OEB requirements.

Pay-as-you-go meters require customers to use cards similar to pre-paid long distance telephone cards. Customers buy power on these cards at a central location. The meter provides customers with information including: real time information on consumption, dollars spent on power over the previous day and month and amount of funds remaining in the meter and estimated days those funds will last, based on current use.

By providing customers with meaningful, easy to understand information about their energy use, utilities have found that these meters encourage

energy conservation. Woodstock Hydro's residential customers using pay-as-you-go meters had an average electricity consumption that was 23% less than households with conventional meters.[2]

A pay-as-you-go meter pilot program is expected to be quite popular with customers. BCPI has already received inquiries about such a program from customers who have heard about the program in the neighbouring Woodstock Hydro service area. However, it is unclear whether pay-as-you-go meters will comply with the minimum technical requirements for smart meters to be included in the provincial Smart Meter Implementation Plan, which is currently under development.

A smart meter pilot program will provide BCPI with an opportunity to gain a technical and operational understanding of smart meter technology and to assess the feasibility and desirability of rolling out the technology across its residential customer class.

The estimated cost of the smart meter pilot for 100 homes is $70,000, which includes capital and training costs of the program, as well as promotional and advertising activities to solicit households to participate in the pilot.

Based on its investigations of smart meter technologies, BCPI may choose to implement a smart meter pilot, or instead reallocate these funds to its conservation asset programs, such as distribution system improvements. This may depend on the final Smart Meter Implementation Plan adopted by the Minister of Energy, and the outcome of BCPI's investigations into smart metering options.

2.3 *House in order*

In addition to improving the efficiency of its electricity system, BCPI intends to explore opportunities and implement initiatives that will improve the efficiency of its own buildings and internal operations. An immediate energy saving opportunity is the replacement of several garage doors.

BCPI's facilities are heated with a combination of electric and gas heat. New, energy efficient, doors are being looked at for the truck bay area, complete with automatic openers. The existing doors are manually operated. It is believed that the shorter opening/closing time and improved insulation of the doors will substantially contribute to energy

[2] Woodstock Hydro's letter to the Ontario Energy Board of August 12th 2004,

savings. Motion sensors are also being considered, as this will eliminate lights being left on.

The estimated incremental cost of these energy-saving upgrades is $12,000.

3 Conservation County

Conservation County is an 8- to 10- month long public education and awareness campaign on energy efficiency and conservation that would be led jointly by BCPI and the County of Brant. Other groups wishing to build on the Conservation County initiatives will be encouraged to do so. The objectives of the program are to:

- Increase County residents' and businesses' level of understanding of the importance of energy conservation and energy efficiency;
- Increase County residents' and businesses' awareness of existing programs and resources that can provide them with ideas, financial support or other assistance to reduce their own energy use;
- Publicly demonstrate the use and benefits of energy efficient technology; and
- Stimulate enthusiasm, innovation and action within the community.

3.1 Program elements

In order to meet the objectives of the program, outlined above, Conservation County will include both education and outreach programs as well as capital energy conservation projects. BCPI has developed several key elements for inclusion in Conservation County. BCPI will work with the County of Brant to further develop and refine the specific initiatives that will be incorporated in the Conservation County program.

The proposed key elements of the Conservation County program are:

- Campaign kick-off event
- Lighting retrofit of one or more public buildings in the County
- Student energy conservation competition
- Household energy reduction competition
- Business energy reduction competition

- County of Brant Energy Conservation Day

Campaign kick-off

A public event to kick off the campaign will be held. The student, household and business competitions will be announced. Informational pamphlets from Natural Resources Canada's Energy Efficiency Office, NEPPA and other readily available resources will be provided to attendees. It is hoped that a program website will be possible, and the address can also be announced.

Lighting retrofits

A lighting retrofit of one or more County buildings will be undertaken. In identifying candidate buildings, special consideration will be given to highly 'visible' buildings in the community (e.g. libraries, arenas, community centres). These types of public buildings would provide a very visible location for demonstrating the effectiveness and benefits of energy efficiency projects. Educational displays regarding the projects would be put up in each of the buildings. The Energy Conservation Day (see below) at the end of the program could be held at one of the buildings that underwent a retrofit.

Student energy conservation competition

The student energy conservation competition will challenge students to come up with innovative, yet practical, ideas for conserving energy in their homes. There will be several age categories (e.g. grades 1-3, 4-6, 7-8, 9-12) with prizes being awarded for each age group. Prizes for first place would be worth approximately $300 -$500 – enough to stimulate a lot of interest in the competition. Local businesses could be approached to donate prizes (or to offset part of the cost of prizes).

Household & business energy reduction competitions

These competitions will challenge residential and commercial customers of BCPI to reduce their energy consumption over several billing periods. The winners for both categories will be chosen based on the percent reduction in energy use over the period compared to the previous year. When entering the competition, residents would be required to explain the measures they undertook to reduce their consumption. Potential prizes for this competition include energy efficient products or appliances (e.g. a new Energy Star® washing machine). Local businesses could be approached to donate prizes (or to offset part of the cost of prizes).

Energy conservation day

The end of the 'Conservation County' campaign will be marked by a large public event called Energy Conservation Day. The event will highlight all of the events and results of the campaign over the preceding months. The event will include:

- educational tours of the lighting retrofits;
- announcement of the winners of the student, household and business competitions (with presentation of awards by county dignitaries, such as the Mayor, CEO of BCPI); and
- an energy exhibition with representatives and/or materials from energy service companies, government energy efficiency programs etc, to provide residents with resources and contacts for undertaking energy conservation measures.

3.2 Preliminary budget

The budget for Conservation County is estimated in Table 1. Depending on the specific lighting retrofit opportunities that are identified in consultation with the County, it may be necessary to shift dollars between the budget items.

Table 1 Conservation County preliminary budget

Budget item	Amount ($)
Lighting retrofit of County building(s)	40,000
Printing of promotional materials & advertising costs	11,000
Conservation Day & Kick-off event - refreshments	1,000
Prizes for competitions	5,000
Program development & delivery	25,000
Total	82,000

Program development and delivery would include:

- Graphic design and content development of promotional materials

- Development and maintenance of Conservation County website

- Development and coordination of student, household and business competitions including: developing the competition rules and eligibility requirements, developing and design the application forms and procedures, setting and coordination the evaluation panel and process, securing the competition prizes, advertising and promoting the competition throughout the county.

- Development of the lighting retrofit educational displays.

- Organizing Energy Conservation Day – including soliciting exhibitors and materials for the exhibition.

4 Capacity building & administration

4.1 *BCPI staff development*

CDM is a new activity for BCPI. It is essential that its staff becomes familiar with programs offered by other jurisdictions, technologies available to be deployed and best practices for conservation and demand management. BCPI intends to establish a fund of up to $15,000 for internal capacity building of its staff on conservation and demand management issues, programs and resources. The fund would be used to cover the out-of-pocket costs, such as registration fees and travel expenses, for staff to participate in related conferences, workshops and seminars.

4.2 *Program administration and planning*

A small allocation of resources is required for external assistance in developing the 2005 CDM plan, input related to CDM into the 2005 rates application, and design and implementation of monitoring and evaluation systems. The expenditures incurred to date related to the preparation of the CDM plan and input related to CDM into the 2005 rates application are tracked in the deferral account. Total resources required are estimated at $20,000 for this work.

5 Program summary and anticipated results

Table 2 summarizes the proposed programs, their costs, and their anticipated results. BCPI will invest $314,802 in CDM, this being the amount of money associated with its third tranche. It is anticipated that these investments will be made by the end of 2005, however some may 'spill over' into 2006 due to resource, timing or other constraints.

Table 2 – Programs and anticipated costs, benefits and results

Program	Cost up to	Benefits/Anticipated results
Distribution system improvements	125,000	Identification of load shifting opportunities and location of optimized 'open points'; increased system efficiency through reduction of line losses.
Smart meter pilot	70,000	Technical and operational understanding of the smart meter technology system and feasibility and desirability of offering the voluntary program to all residential customers.
Garage door replacement	12,000	Energy savings from reduced open/closing times and improved insulation of doors.
Conservation County	82,000	Significant energy savings from lighting retrofits of County buildings. Public education display on lighting retrofits. Stimulation of enthusiasm, innovation and action regarding energy conservation among County residents and businesses. Increased awareness and understanding of energy conservation and energy efficiency issues, resources and program.
Staff development	15,000	Increased internal-capacity to deliver cost-efficient, effective CDM programs to its customers.
Planning, administration and monitoring	20,000	Coordinated plan for moving forward, and traceable results.