

July 1, 2002

**Green Power Product Offering** 

2002-2003 Program Plan

### **Summary**

Electricity generated from renewable resources is called green power. In Montana, the 2001 legislature included a requirement that the default supplier offer its customers an opportunity to purchase a separate green power product. These facts are the drivers behind the development of a green power product offering to be implemented by NorthWestern Energy in the Montana service territory.

The initial green power product offering is proposed to be purchased from Bonneville Environmental Foundation (BEF) and sold to NorthWestern Energy electric distribution customers in 100 kiloWatt hour blocks for \$2 per block. Customers may choose to purchase multiple blocks. Depending upon how the program develops, this price may change. While other green power products may be available, the BEF product was selected for this first year in order to expedite the program offering by utilizing an existing regional infrastructure.

The NorthWestern Energy Green Power Product Offering is designed to:

- comply with the legislative requirement for the default supplier to offer its customers a separate green default supply product,
- utilize existing infrastructure and resources to minimize program start-up costs and increase customer participation,
- allow flexibility to the customer in the amount of green power they support, and
- create an opportunity to further the development of renewable energy resources in Montana by analyzing the results of the start up year.

This initial product offering for 2002-2003 provides the opportunity to develop a green product and evaluate the renewable energy markets one step at a time. The first year will better define customer interest in green power products. Initial customer participation and acceptance may be affected by the fact that the offering is coincident with the July 1, 2002 rate increase following several years of no electric supply rate increases. The outcome for wind generation as part of the default supply portfolio may impact future product offerings in Montana.

With approval by the Montana Public Service Commission (MPSC) of the program and the rates to support it, this program will begin in the NorthWestern Energy Montana service territory July 1, 2002. This document is part of a filing along with the proposed rate schedule for MPSC approval.

2002-2003 Program Plan

## **Program Discussion**

The 2001 Montana Legislature passed a green power product requirement as part of HB474:

MCA 69-8-211 (6) A public utility shall offer its customers an opportunity to purchase a separately marketed product composed of power from renewable resources. This product may be priced differently from the standard electricity product authorized in this section. For the purposes of this section, "renewable resources" means biomass, wind, solar, or geothermal resources.

Green power offerings allow customers to support the generation of renewable energy through existing projects and to encourage the development of additional renewable generation. In effect, customers can choose to pay a premium on their electric bill for the environmental benefits associated with renewable generation.

#### Background

Since electrons cannot be physically distinguished by generation source once flowing on the transmission and distribution system, customers cannot specifically purchase and use green power electrons through the electric grid. Instead, the generation of the electric power and the associated marketable environmental attributes of renewable generation are separated. These environmental attributes are called "green tags" as if the "renewable" electron had a green tag attached to it. Green tags may be sold separately from the energy generated, and the energy generated may physically occur in another state.

### **Customer Benefits**

NorthWestern Energy's green power product first year offering provides the customer a choice to buy a green product and additionally assures that product is generated from a resource endorsed by the renewable energy community as being "green." The customer has the benefit of choosing to support electricity generated from environmentally-friendly sources.

For the purposes of NorthWestern Energy's green power product offering, customers may choose to buy environmental benefits in 100 kiloWatt hour blocks priced at \$2 per block and may choose the number of blocks that fit their pocketbook.

NorthWestern Energy proposes offering a product meeting a recognized renewable standard. This assures customers that the product complies with a tracking and accounting process and that the environmental benefits come from solar, wind, biomass, or geothermal resources that have been placed in operation since May 1999.

#### Initial Product Design

NorthWestern Energy's start up program follows a strategy that has worked in other service territories in the Northwest by buying green power product through the

2002-2003 Program Plan

Bonneville Environmental Foundation (BEF). BEF has been selected from a handful of marketers of environmental benefits. BEF is a non-profit organization developed in partnership with the Bonneville Power Administration to develop new renewable energy projects in the Pacific Northwest. The product BEF will provide NorthWestern Energy is predominantly from a wind project in Wyoming. This approach for the first year provides a program that can be quickly executed for the first year. The agreement provides a flexible offer where the product is purchased by the utility on an as-needed basis.

This initial offering allows an immediate product for the customers interested in supporting renewable energy at this time. Some customers already have awareness of BEF and/or green power offerings such as this one. This initial offering allows additional time for additional research and development of other resources, products and marketing strategies to achieve a broader product offering.

NWE will continue its research over the next six months to better assess customer interest and other product offerings. The outcomes of this research will be evaluated against other criteria to contribute to future program design and product offerings that will be presented as soon as available.

## **Goals and Assumptions**

#### Goals

- Comply with NorthWestern Energy's legislative requirement to have green default supply product available to its customers
- Further the promotion and development of renewable resources.
- Target customers with interest in supporting green resources by utilizing marketing agreements with the key stakeholders.
- Initiate a flexible initial offering that allows for a "learn and grow by doing" approach and utilizes key stakeholders and evolving information to grow the program.
- Follow simple program design for initial offering to allow for immediate implementation with modification to follow as needed.

#### **Assumptions**

1. NorthWestern Energy's green power product offering should deliver maximum renewable generation benefits in NorthWestern Energy's territory.

While the initial product offering will secure green tags from BEF, the preference of NorthWestern Energy would be that future programs should focus on the development of resources within its Montana service territory. While it can be argued that development of renewable resources in the region provides societal benefits without regard to state boundaries, NorthWestern Energy is committed to using funds collected from its customers through Universal System Benefits (USB) dollars or green power product offering rates to further the development of renewable energy in its Montana territory to the greatest extent possible.

2002-2003 Program Plan

- 2. Customers indicate a general willingness to buy green power and to support the generation of electricity through renewable energy. However, experiences in other markets indicate the degree to which customers are willing to pay for such products when offered the opportunity is not as great.

  Customer interest may be affected by any number of factors. NorthWestern Energy's plan for the first year tests the initial reaction to the product and allows for the product offering to evolve as customer demand warrants.
- 3. Involving the key stakeholders in the product offering and its marketing has been a part of the successful strategies for green power programs.

  This proposal engages the green power advocacy groups such as the Montana Electricity Buying Cooperative (MEBC) in the green power product marketing.

  NorthWestern Energy will enter into supportive marketing agreements with organizations to provide incentive to the stakeholder groups to market the green power product offering in addition to the utility's efforts. These groups have existing contacts with key customer groups and can encourage their enrollment.
- 4. NorthWestern Energy's green power product offering start-up costs can be managed through the contract with BEF and the use of USB funds designated to renewable energy activities.

The BEF contract minimizes start up costs associated with acquiring green tag inventory by allowing NorthWestern Energy to buy tags as needed. USB funds are to be used for the promotion of renewable energy and as such and initial marketing, certification, and administrative costs can be front-funded with USB dollars allowing more funds to flow back to the development of additional renewable resources in NorthWestern Energy's service territory.

5. Few customers will be ready to support renewable energy for their full electric usage at the onset.

The initial product offering allows customers to support green power in 100kWh blocks to fit their budgets. At an estimated premium of \$0.02/kWh, a customer may select their monthly commitment to green power starting at \$2 a month. For commercial customers that wish to promote their "green" buying, the minimum will be based upon a percentage of the customer's average usage rounded to the next 100kWh.

## **Program Operation**

NorthWestern Energy will enter into contracts and agreements necessary to purchase and the green product. Additionally, NorthWestern will follow the steps necessary to assure program certification. Throughout the first year, experience will be gained for future program design.

2002-2003 Program Plan

### 1. Contracts and Agreements

NorthWestern Energy will enter into an agreement with BEF to purchase the green tags for the product offering on an as-needed basis. This contract will be in place through June 30, 2003. NorthWestern will enter into marketing partnerships to increase participation and understanding by customers of renewable energy products. These partnerships will be mutually supportive, but non-exclusive. The Montana Electric Buying Cooperative, a group with a mission of promoting or offering renewable energy and conservation, will be one marketing partner. Other organizations associated with environmental interests and energy supply products are other likely partners. These partnerships will be focused on increasing enrollments in the NorthWestern Green Power Product Offering and will support cooperative efforts to educate customers regarding the green product and to encourage program enrollment.

#### 2. Promotion

NorthWestern Energy will promote the product offering through bill inserts, with limited newspaper advertising, and through marketing agreements with groups whose constituencies are likely to buy green power. The product offering will be included in presentations with public groups, trade shows and environmental events and publications.

The endorsement of the NorthWestern Energy Green Product Offering and outreach efforts by environmental and faith-based groups and licensed energy suppliers will increase the product offering credibility and participation. Promotion of the product offering by these groups may be funded with USB renewable dollars. The marketing agreements with such groups will include the marketing strategy to be followed, the message requirements to receive funding, and any additional funding provided for resulting enrollments.

### 3. Market Research/Feedback/Monitoring

Green power experts suggest participation in the first year can reach .5% to 1% of the customer base. However, program design to increase saturation takes about a year. Market research and fine-tuning of design can substantially increase participation and assure product offering goals are reached. Ultimately, an offering could develop that has "generic" electricity bundled with environmental attributes as a green supply rate, rather than tag/block approaches.

#### 4. Budget

The following table (Table 1) represents a base case estimate of revenues and expenses given a reasonable set of assumptions. The initial participation level by the end of the 2002-2003 program year is assumed to achieve .5% of the residential customer sector (each participating customer purchasing one 100 kWh block per month) and 1% of the commercial customer sector (each participating customer purchasing five 100 kWh blocks per month). Kick off funding for the green power product offering will come from USB funds. USB funding support for the 2002-2003

2002-2003 Program Plan

year is assumed to be approximately \$100,000. Variables that may have a significant impact going forward include:

- Reception to marketing.
- Support of renewable community for the initial product.
- Successful contract with BEF.
- Successful Marketing Agreements.

2002-2003 Program Plan

## Table 1. Green Product Offering Budget

### Base Case Financials for Period July 1, 2002 - June 30, 2003

#### **Customer Information:**

Total number of eligible customers (non-choice)
Residential 288,000
Commercial 30,000

Targeted yearly penetration % # yearly customers (per year) Residential 0.50% 1440 Commercial 300 1% Average purchase per month(kwh block) Total 1st year (kwh) Residential 100 432,000 Commercial 450,000 500 882,000

002,000

Customer rate \$0.020

Revenues:							
	Residential Commercial					\$8,640 \$9,000	
		TOTAL REVENUES					\$17,640
Costs:							
	BEF Tags						
	Unit cost	\$	0.014	\$	12,348		
	Marketing Internal						
		Program Implementati	on	\$	60,000		
		Research		\$	15,000		
		Evaluation		\$	5,000		
	External	Joint Marketing		\$	25,000		
		sub- total				\$ 105,000	
		TOTAL COSTS					
							<u>\$ 117,348</u>
Net Proceeds (Rev-Costs)							(\$99,708)
From USB Funding						\$ 99,708	
To Montana renewables							

#### **Assumptions:**

- 1. Total 1st year kwh is based on 1/4 year, or three months
- 2. Commercial block is shown at 500 kwh but may be a % of total consumption
- 3. BEF's first year green tag price is \$14/Mwh or \$0.014/kwh
- 4. Shortfall in net proceeds to be funded by USB funds