

**EXHIBIT A**

**to**

**AFFIDAVIT OF WILLIAM R. EDMONDS  
IN SUPPORT OF MOTION FOR SUMMARY DETERMINATION**

## Smart Energy Program Description

### I. Summary

NW Natural's Smart Energy program will allow residential and commercial customers to offset the greenhouse gas emissions associated with their natural gas use. NW Natural is partnering in this program with The Climate Trust, an Oregon-based nonprofit with the mission of purchasing high quality project-based emission reductions. The Climate Trust will develop greenhouse gas (GHG) offset projects on behalf of Smart Energy participants with the first priority for these projects being to help bring biogas to the region.

Figure 1 below shows schematically the process used by Smart Energy to offset a customer's greenhouse gas emissions using a biogas project. It is estimated that dairy cows produce about 120 pounds of waste each day. This waste is most often managed by placing it in open lagoons where the anaerobic decomposition process produces methane, which is 23 times more potent than carbon dioxide (CO<sub>2</sub>) as a greenhouse gas. Manure digesters, also known as biodigesters, capture methane from dairy farms to produce energy, but have not been developed in large numbers in the region. Biodigesters hold the promise of providing substantial greenhouse gas benefits as well as providing other environmental benefits such as improving water quality and reducing odors. Besides promoting the development of biogas in the region, funds from Smart Energy participants may be used to promote other clean, innovative greenhouse gas reduction projects in the region. All project-based reductions must meet The Climate Trust's high standards for quality offsets and will be administered and permanently retired on behalf of Smart Energy participants by the Trust.

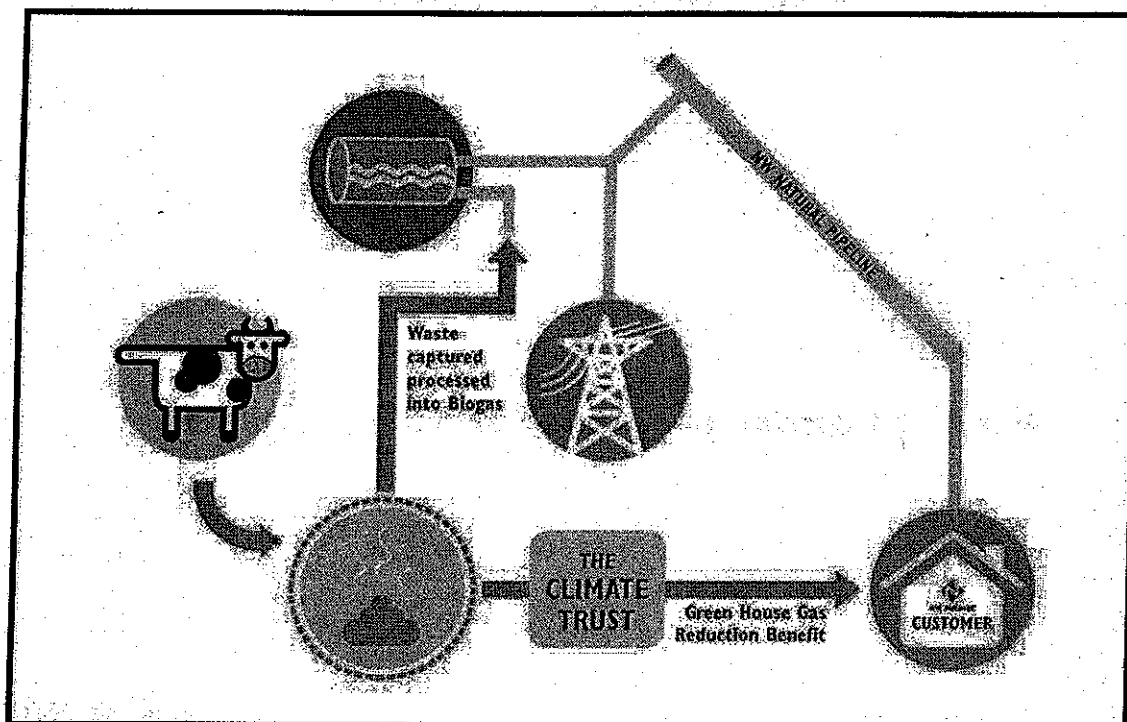


Figure 1: Smart Energy Diagram

## **II. Product Purpose**

NW Natural believes our first priority with our customers regarding climate change is to help them reduce their carbon footprint by using natural gas as efficiently as possible. The Company's successful partnership with Energy Trust of Oregon (ETO) has resulted in a trend of increasing energy efficiency, with our customers saving 2.2 million therms in 2006; we hope to continue to find new ways to work with ETO to continue this record of increasing efficiency. Our survey of customers suggests they expect their gas utility to do more to help them reduce their impact on climate change and are supportive of a program that allows them to voluntarily offset emissions by supporting biogas in the region.

NW Natural believes there will be a federal program to limit greenhouse gas emissions and supports enactment of federal climate legislation. However, the Company believes that we should not wait for this future regulatory program to help our customers reduce their climate impacts. During this "voluntary phase" of carbon regulation, it is appropriate to allow voluntary participants to offset their carbon footprint using high quality projects such as those developed by The Climate Trust.

Oregon has established a precedent of addressing the issue of climate change, in part, by funding high quality offsets developed by The Climate Trust. In 1997, Oregon passed the first regulation of GHG emissions in the United States with the enactment of the Oregon Carbon Dioxide Standard. This state law requires power plants above a certain size sited in Oregon to offset a portion of their carbon dioxide emissions. Under the law, regulated entities can opt either to develop their own approved offset projects or can use project-based reductions developed by The Climate Trust for the purpose of meeting the standard. To date, every power plant under the jurisdiction of the standard has chosen to meet their compliance obligation through The Climate Trust.

## **III. Product Design**

### **A. Customer Options**

Residential customers of NW Natural may participate in Smart Energy by choosing either a "block" or "rate" option for offsetting their emissions. Under the block option, customers will pay \$6/month to offset their emissions. This block cost is based on the cost, as of June 29, 2007, of offsetting the emissions associated with natural gas use from the "average" residential home using 686 therms per year. Alternatively, residential customers can choose a "rate product" so that their payment varies based on their usage. The rate product results in a charge of \$0.10486 per therm used or approximately a 7.8% increase over current residential Rate Schedule 2 billing rates. Because gas usage is highly seasonal and therefore bills are seasonal as well, the rate option will result in a substantially higher premium in the winter. To avoid this fluctuation, customers choosing the rate options will be encouraged to adopt NW Natural's Equal Pay option at the same time. The total offsets purchased from The Climate Trust may vary based on the cost of those offsets.

Because the usage of particular commercial customers varies widely, a block product based on average commercial usage is not appropriate. Commercial customers may choose a fixed

monthly rate of their choice (with a minimum of \$10/month). A carbon calculator will be used to show commercial customers an estimate of the reduction in their carbon footprint. This estimate will be based on the customer's previous year's gas usage and the current offset price.

The cost of these offset products is based on current market costs for offsets. In communicating these costs with customers, the Company will explain that offsets are an emerging market based on the cost of new and innovative technologies. As a result, these costs may fluctuate and will likely rise over time. The actual offset levels may vary slightly and the actual offset level will be communicated with our customers through our annual reporting process to customers.

NW Natural estimates regarding customer participation in the Smart Energy program are provided in Table 1. Because there are no programs of this kind with an operating history, the Company has estimated that Smart Energy will draw participation from a wider population than the average green electricity programs around the country but will not have as many sign ups as the two very successful "green electricity" programs operated by Portland General Electric and Pacific Power.

**Table 1**

NW Natural SMART ENERGY Program Participation Estimates (as % of Total NW Natural Customers)						
	2007	2008	2009	2010	2011	2012
Residential	0.25%	0.75%	1.25%	1.75%	2.25%	3.00%
Commercial	0.02%	0.05%	0.10%	0.20%	0.30%	0.40%

**B. Pilot Length and Reporting**

The Smart Energy program is proposed to operate as a five-year pilot; after this period the Company and the OPUC will analyze its benefits and determine if it should be continued as is, modified or discontinued. The Company believes the regulatory context around greenhouse gas emissions will very likely change dramatically during this period and thus substantial changes in the Smart Energy program may be appropriate if it is to be continued. The Commission or the Company and our partner The Climate Trust can call for a review of the program at any time and this program review will include key stakeholders.

An annual report on the program will be provided to the OPUC after each program year. The report will include participation details, an analysis of funds collected and expenditures related to the product, and a review of offset expenditures by The Climate Trust on behalf of participants. After the third full year of the program, the Company will provide a more detailed review of the program.

A report on program accomplishments also will be provided to all Smart Energy participants on an annual basis.

### C. Program Costs

During the five-year pilot, the total cost of the Smart Energy program is expected to be \$5.7 million. The total cost is subdivided into three categories:

- 1) Costs associated with program startup include initial work by The Climate Trust to develop the program, capital costs associated with the Company's information systems and phone system as well as the first three years of marketing the product. The total startup cost is estimated to be \$1.3 million.
- 2) Ongoing program costs include program administration, ongoing marketing and communication and phone center costs. The total ongoing costs of the program are estimated to be \$1.3 million.
- 3) Costs associated with purchases of offsets are estimated to be \$3.1 million over the course of the program. This includes all costs associated with developing project-based reductions including contracting as well as monitoring and verification of the benefits.

Table 2 details program costs by cost category and program year.

Table 2

NW Natural SMART ENERGY Program Costs by Cost Category and Program Year							
Participant Costs	2007	2008	2009	2010	2011	2012	Total
Costs of CO2 Offsets	25,184	232,819	400,441	581,606	772,940	1,059,394	3,072,383
Ongoing Program Costs	68,716	136,832	142,101	322,574	328,245	334,744	1,333,213
<b>Total</b>	<b>93,901</b>	<b>369,651</b>	<b>542,542</b>	<b>904,180</b>	<b>1,101,185</b>	<b>1,394,138</b>	<b>4,405,596</b>
Start up Costs	1,275,200						1,275,200
<b>Total Program Costs</b>	<b>1,369,101</b>	<b>369,651</b>	<b>542,542</b>	<b>904,180</b>	<b>1,101,185</b>	<b>1,394,138</b>	<b>5,680,796</b>
Cost Sharing							
Participant Costs	93,901	369,651	542,542	904,180	1,101,185	1,394,138	4,405,596
All Customer Costs	1,048,000	0	0	0	0	0	1,048,000
NW Natural Costs	227,200	0	0	0	0	0	227,200
	<b>1,369,101</b>	<b>369,651</b>	<b>542,542</b>	<b>904,180</b>	<b>1,101,185</b>	<b>1,394,138</b>	<b>5,680,796</b>

### D. Allocation of Costs

Because the Smart Energy program provides a broad array of benefits for customers, whether or not they enroll in the program, and because of the potentially prohibitive nature of including start-up costs in the program premium, the Company is recommending that startup costs of \$1.048 million be rolled into general rates.

The benefits to all customers of the Smart Energy Program are broad. First, the program provides real and measurable greenhouse gas benefits. While these offset benefits will be retired by The Climate Trust for the participants, the environmental benefits of these actions accrue to all. Second, the program allows all NW Natural customers an opportunity to learn about their "carbon footprint" and the specific steps they can take to reduce it. As our state and country

move toward carbon regulation, it will become more important that all customers make the connection between their energy use and their carbon impacts. Third, the Smart Energy program will provide an opportunity for the State of Oregon, Public Utility Commission, and NW Natural to develop and hone policy tools that will be critical in the upcoming regulation of greenhouse gases. Finally, the practice of collecting start-up costs from all customers can be justified because the program creates opportunities for all customers to participate. The existence of the program, and its availability to all customers, is of value for all and thus justifies spreading some costs to non-participants.

Product participants will be required to pick up all of the costs associated with offsets as well as all the on-going program costs and it is these offset and program costs that result in a premium of \$6/month for the block product.

#### **IV. Partnership with The Climate Trust**

The Climate Trust (TCT) is a nonprofit 501(c)(3) organization with the mission of developing high quality projects that reduce greenhouse gas emissions. TCT administers a program for offsetting a portion of emissions from power plants sited in Oregon as well as programs that develop projects for a wide variety of companies and individuals around the country. The Climate Trust has developed a portfolio of 17 offset projects valued at \$9 million, making the organization one of the largest institutional purchasers of offsets in the U.S.

##### **A. Offset Purchase and Offset Cost**

The Climate Trust's offset price paid as part of their corporate partnership program currently is \$10/ton of CO<sub>2</sub>. This cost covers the development of high-quality offset projects, the dollars that go into purchasing the benefit from project owners, contracting costs, monitoring and verifying costs as well as program administration and management costs.

An offset product like Smart Energy is a new concept with very little track record. There are now two similar products (one in California and one in Vermont). NW Natural will have the first product offered by a stand alone gas utility and it will be the first product focusing on biogas development as the primary means of providing offsets. Additionally, Smart Energy is being offered to customers, many of whom live in areas with very successful green electricity programs. It is not known whether these green electricity buyers will be likely candidates for another green energy offering or if they may be reluctant participants.

Because of the unknowns regarding movement in offset price over time, the Company proposes charging participants a slightly higher offset cost as a "hedge" against future price increases. The Company proposes using \$12.50/ton as the offset costs for Smart Energy. The Climate Trust believes that offsets derived from biodigesters will command a price premium over the cost of other offsets because these offsets are considered to be of very high-quality and because regulatory systems (in California and the Northeast) have developed protocols that establish accounting rules for these projects. It is anticipated that the market for greenhouse gas offsets in the United States will change significantly over the pilot period and will almost certainly rise. The \$12.50 per ton is consistent with the current retail rate of offsets on the market (e.g., the retail rate through CarbonCounter.org, The Climate Trust's online offset tool, is \$12.00 per ton.)

There is additional price pressure on Smart Energy because of its focus on one type of high quality offset product, those stemming from biodigesters. As a result, The Climate Trust will not be able to obtain the lowest cost offsets that might be available through access to a wide range of project types and sectors. There are also anticipated to be higher initial selection and contracting costs associated with the particular program because it is a pilot program of limited size and because of the specific focus on biodigester derived offsets in a limited geographic scope. The cost of \$12.50 per ton is intended to cover these higher costs and to provide a cushion in the case of price increases.

If for some reason a biodigester project is not available, The Climate Trust will purchase other offsets to meet its obligations to the program from other projects that promote clean, innovative energy in the region. All projects selected to meet obligations to participants must meet the Trust's well respected standards for high quality offsets.

If offset costs are at any time less than the \$12.50 collected from customers, the additional funds will be used to purchase additional offsets that will be held by the Trust. These additional offsets will be used to meet obligations to Smart Energy participants and will be retired permanently by the Trust.

The pricing for the Smart Energy rate product is designed for a complete offset of emissions or in the case of the block product a complete offset based on average natural gas usage. This pricing is based on The Climate Trust's understanding of current and expected market conditions. However, if the price of offsets rises substantially, it would be necessary to communicate this increase with customers and explain that their offset dollars will not fully offset their emissions. Under such a situation, the Company may give participants the option of continuing to pay \$6/month but receive less than a full offset of their emissions for their payment or to increase their monthly payment to cover the cost of fully offsetting the emissions associated with their natural gas consumption.

## **V. Accounting Procedures**

Accounting procedures have been designed to ensure complete transparency for the Commission and for Smart Energy participants regarding the flow of participant funding. In setting timeframes for offset expenditures, the Company has tried to balance the desire of participants to see their funds put to work as quickly as possible with the competing desire to see these funds channeled to biogas projects in the region.

The key accounting guidelines are as follows:

### **A. Funding and Administration**

Each month, the Company will bill and collect Smart Energy funds in accordance with a new Smart Energy Tariff Schedule. By the 20<sup>th</sup> of the month following the billing month, the amount collected will be deposited into a market-based interest bearing bank account dedicated to the Smart Energy program (Smart Energy Account).

The Company will be reimbursed from the Smart Energy Account each month for actual program administration costs incurred.

The Company will distribute Smart Energy Account funds to The Climate Trust on a monthly basis for the purchase of offsets. These funds will be held by TCT in a market-based interest bearing account with interest accruing to the purchase of additional offsets.

#### **B. Startup Costs**

To fund program startup costs, the Company has proposed to reduce the refund due to customers as a result of the settlement of the NWPL rate case. The reduction will be \$1.048 million, which will be debited to the 191 refund account and credited to a new 242 Smart Energy liability account. The estimated per therm rate impact of the \$1.048 million refund would be \$0.00191, or 0.1% increase over current residential Rate Schedule 2 billing rates.

#### **C. Expenditures by The Climate Trust**

The procedures associated with The Climate Trust's use of Smart Energy funds will be contained in an agreement between the Company and The Climate Trust. A draft agreement will be made available for review by the Commission Staff.

The key components of the agreement with the Trust will include the requirement that The Climate Trust must commit all Smart Energy funds received within two years from when customers purchase the product. (The term "commit" will be defined as having the funds under contract for a stream of future offset benefits.)

There could be unforeseen circumstances that would mean that substantial environmental benefits would accrue to Smart Energy participants if funds were held beyond the two year period. For example, if a known biodigester project was soon to be available, it would better meet the goals of participants to waive the two year requirement for committing funds. Holding dollars for longer than a two year period would be allowed only after approval of the OPUC Staff.

The agreement between the Trust and the Company will delineate that the first priority for project-based reductions under the Smart Energy program is for biogas projects in the region. If this offset option has been exhausted or is unavailable, funds will be used to support clean energy opportunities (e.g., combined heat and power, efficiency) that meet the Trust's rigorous quality standards.

### **VI. Shareholder Support**

NW Natural does not believe it can ask its customers to take a voluntary action to address climate change if the Company is not taking the same steps. For that reason, NW Natural shareholders will purchase the first block of Smart Energy at the time the tariff is approved by the Commission. Shareholders will provide a fixed contribution of \$77,000, which represents a total offset of the natural gas used to heat its offices, service centers and shops for the entire five-year period of the pilot program. If the pilot is discontinued for any reason, this payment will not be altered.



To further demonstrate its commitment to the program, and to mitigate the costs borne by all customers, NW Natural has also agreed to cover ten percent of the program's startup costs, totaling \$130,000.

Finally, there are some limited capital expenditures associated with the development of the program (\$97,200 over the five year pilot). These capital costs have been removed from the proposed startup costs spread to all customers, and will be absorbed by the Company until the next general rate case.

The total shareholder cash contribution of these components is \$207,000 plus the benefit to customers of delaying the recovery of \$97,200 until the next general rate case. Given that a carbon offset product may have as much negative impact on our business as it has positive, the Company believes this is an appropriate sharing of costs among the Company, program participants and all customers.