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**BEFORE THE
PUBLIC UTILITIES COMMISSION
OF THE STATE OF IDAHO**

IN THE MATTER OF THE APPLICATION OF)
ROCKY MOUNTAIN POWER FOR APPROVAL) **Case No. PAC-E-10-07**
OF CHANGES TO ITS ELECTRIC SERVICE)
SCHEDULES)

Direct Testimony of

KEVIN P. LAWRENCE

On Behalf of

Monsanto Company

October 14, 2010

ROCKY MOUNTAIN POWER

**Before the
Public Utilities Commission
Of the State of Idaho**

CASE NO. PAC-E-10-07

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Direct Testimony of Kevin P. Lawrence**

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3
4 **I. INTRODUCTION**

4 **Q PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND**
5 **EMPLOYMENT.**

6 A Kevin P. Lawrence, Monsanto Company, 800 N. Lindbergh Boulevard, St. Louis,
7 Missouri 63167.

8 **Q WHAT IS YOUR CURRENT POSITION WITH MONSANTO COMPANY**
9 **AND WHAT DO YOUR RESPONSIBILITIES INCLUDE?**

10 A Vice President, Procurement, Engineering and Supply Chain. In addition to other
11 duties, I have overall responsibilities for the purchase of raw materials, energy and
12 goods and services required for the manufacture of Monsanto products at its
13 production locations which includes the Soda Springs Plant.

14 **Q PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND**
15 **AND BUSINESS EXPERIENCE.**

16 A I have a degree in Chemical Engineering from The University of Tennessee and
17 an MBA from Washington University in St Louis. I have been employed by
18 Monsanto for 30 years and I have worked in virtually every business sector in the
19 company. I have been responsible for the procurement of Monsanto raw
20 materials and energy since June 2008.

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22

1 **II. PURPOSE OF TESTIMONY**

2 **Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

3 A The purpose of my testimony is to: (1) describe the worldwide phosphorus
4 market; (2) discuss market changes and competitiveness resulting from changes in
5 technology and foreign supplies; (3) describe how phosphorus from the Soda
6 Springs plant is used and marketed; (4) describe why the Soda Springs plant must
7 remain competitive and viable; (5) provide a Monsanto perspective on the
8 glyphosate business; and; (6) provide the perspective of management in allocating
9 capital.

10
11 **III. PHOSPHORUS MARKET AND COMPETITIVENESS**

12 **Q PLEASE DESCRIBE THE PHOSPHORUS MARKET IN THE U.S. AND**
13 **WORLDWIDE.**

14 A The global phosphorus market has experienced significant change in the last 20
15 years. What began as an industry concentrated in the United States and Europe
16 for most of the 20th century has been transformed rapidly into one dominated by
17 the Chinese. In 1990 the global elemental phosphorus market was 3.5 billion
18 pounds, 85% of which was produced in Europe and North America. By 2001 the
19 market had shrunk to 1.6 billion pounds, 75% produced in China. Global demand
20 is still falling and the Chinese have shut down many small phosphorus furnaces
21 driven by lack of efficiency and inherent environmental concerns. However, this
22 older capacity has been replaced with new, larger and more efficient furnaces
23 boosting China's capacity to over 2.0 billion pounds today operating at about 45%

1 of capacity. Outside of China, there are only three significant phosphorus plants,
2 one in the Netherlands, one in Kazakhstan and Monsanto's plant in Soda Springs,
3 Idaho. In 2002, Monsanto's plant was the largest in the world. There wasn't a
4 Chinese producer with even 25% of our capacity. Today, there are still about 80
5 plants in production and several Chinese plants are larger than our Soda Springs
6 plant, with the largest facility possessing capacity one and one half times the size
7 of Soda Springs

8 There are two primary reasons for this change – technology and the price
9 of electricity.

10 (1) Alternate technology, referred to as the wet acid process, has provided
11 industry with the phosphorus molecule at a significantly lower cost than
12 the cost of elemental phosphorus. This has led to the dramatic drop in
13 global demand for elemental phosphorus.
14 High priced electricity led to the demise of most U.S. and European elemental
15 phosphorus plants. The new plants in China have low costs and many even
16 generate their own power in hydro electric plants.

17 **Q WHAT PART OF THE COSTS OF PRODUCING ELEMENTAL**
18 **PHOSPHORUS DOES ELECTRICITY REPRESENT?**

19 **A** Electricity represents approximately 20-30% of the cost of producing elemental
20 phosphorus. For Monsanto, electricity is the largest single cost factor, and the
21 only significant cost outside of our control.

1 **Q PLEASE DESCRIBE HOW FOREIGN SUPPLIERS HAVE AND ARE**
2 **EXPECTED TO IMPACT THE ELEMENTAL PHOSPHORUS MARKET**
3 **IN THE FUTURE.**

4 A Historically, U.S. demand for elemental phosphorus was supplied by U.S. sources
5 with some imports from Europe. Today, U.S. demand is primarily met either by
6 Monsanto or by the Chinese. Because of their cost position, the Chinese sell
7 elemental phosphorus delivered to the U.S. at very competitive prices. With their
8 current electricity, labor and environmental cost advantages coupled with excess
9 capacity, the Chinese will likely continue to gain market share at the expense of
10 Monsanto. Additionally, due to the available excess capacity, pricing of elemental
11 phosphorus is not expected to increase significantly in the foreseeable future.

12 **Q DOES PHOSPHORUS PRODUCED AT THE SODA SPRINGS PLANT**
13 **OFFER ADVANTAGES?**

14 A No, elemental phosphorus is generally viewed as a commodity product by our
15 customers. The Soda Springs plant offers certain advantages to Monsanto
16 because it is the most technically advanced, safest and most environmentally
17 responsible plant in the world. It is the only elemental phosphorus plant which
18 meets the highest standards of OSHA VPP STAR, Bureau of Land Management,
19 and ISO 9002. It is a well maintained and highly invested facility providing the
20 customer advantage of being a very reliable source. It has a highly motivated and
21 competent work force. Soda Springs operates efficiently and has higher safety
22 and environmental standards than any phosphorus plant in the world. Monsanto

1 has its own mine leases which provide phosphate ore. These leases are managed
2 and the mines are operated under the most stringent environmental and safety
3 requirements. All of this comes at higher operating costs than our Chinese
4 competition.

5
6 **Q WHAT ACTION HAS MONSANTO TAKEN TO REMAIN COST**
7
8 **COMPETITIVE?**

9
10 **A** To be successful in the future, Monsanto will operate the Soda Springs plant to
11 achieve the lowest possible cost. To manage input costs, Monsanto has contracted
12 with many different sources for our coal and coke requirements, which were
13 competitively bid to maintain the lowest possible cost. We have globally sourced
14 raw materials to reduce cost. We are consistently working to improve our
15 processes and reduce waste. At Soda Springs we are analyzing every element of
16 cost to effect reductions while still maintaining the highest standards of
17 manufacturing operations. Electricity is the only input over which we have no
18 control. Unfortunately, it is our largest single cost factor.

19 **IV. SODA SPRINGS PHOSPHORUS PRODUCTION AND USE**

20 **Q HOW IS PHOSPHORUS FROM THE SODA SPRINGS PLANT USED BY**
21 **MONSANTO?**

22 **A** The Soda Springs plant ships phosphorus to Monsanto plants in Luling, Louisiana
23 and Camacari, Brazil. There we convert the phosphorus to phosphorus trichloride,
24 a raw material required to produce glyphosate. The resulting glyphosate

1 intermediate is then shipped from each of these locations to plants around the world
2 where the final products are formulated for the local agricultural markets.

3 **Q DOES THE ENTRANCE OF CHINESE PRODUCERS INTO THE**
4 **GLYPHOSATE MARKET IMPACT THE LONG-TERM VIABILITY OF**
5 **THE SODA SPRINGS PLANT?**

6 A As with elemental phosphorus, the Chinese are selling glyphosate into the world
7 market at low prices. Their quality is satisfactory and functionally equivalent to
8 Monsanto's glyphosate. Monsanto's glyphosate production advantage is years of
9 operating experience, cutting edge technology and scale. Our production capability
10 allows Monsanto to enjoy a competitive glyphosate cost position relative to
11 Chinese producers. But, if Monsanto's competitive glyphosate cost position is lost,
12 sourcing from China could occur, negatively impacting the operations of the Soda
13 Springs plant.

14 **Q WHAT RECENT ACTION BY THE CHINESE AFFECTED THE**
15 **GLYPHOSATE MARKET?**

16 A. Over the past two years the Chinese flooded the market with very low priced
17 generic glyphosate. Many of our farm customers purchased the lower priced
18 Chinese product and Monsanto's sales rapidly declined. In addition, our Roundup®
19 herbicide gross profit, which had peaked in 2008, declined by seven percent in
20 2009 and an additional 92% in 2010. The changes that occurred in the global
21 glyphosate market, including oversupply from Chinese producers, have created a

1 significant compression in the manufacturer's margin. We believe that the market
2 changes are permanent and will therefore have a long term impact on the level of
3 cost absorption and profits that can be generated by this business. Since electricity
4 is the only significant input that we are forced to buy from a monopoly supplier, it
5 is the largest threat to our cost position and a key threat to the viability of the Soda
6 Springs plant.

7 **Q FROM MANAGEMENT'S PERSPECTIVE, WHY MUST PHOSPHORUS**
8 **PRODUCED AT THE SODA SPRINGS PLANT REMAIN COMPETITIVE**
9 **WITH OTHER SOURCES.**

10 A Today, Monsanto can buy near equivalent quality phosphorus from China at
11 competitive prices that can be used for our glyphosate production. If Soda Springs
12 cannot remain competitive, Monsanto management will have no alternative but to
13 purchase phosphorus from least cost sources to remain competitive and to
14 successfully serve our farm customers.

15 **V. CAPITAL COMMITMENTS**

16 **Q EXPLAIN SOME OF THE RECENT AND FUTURE MAJOR CAPITAL**
17 **COSTS NECESSARY TO OPERATE THE SODA SPRINGS PLANT AND**
18 **MINING OPERATIONS.**

19 A Since 2005 Monsanto has invested over \$70 million in capital projects at Soda
20 Springs for exploration and new mine development, heavy equipment, furnace
21 upgrades, process improvement, environmental compliance and cost improvement

1 projects. Our capital plan for 2011 through 2015 requests corporate funding of an
2 additional \$75 million for the Soda Springs plant. In large part, these expenditures
3 are driven by strict environmental regulations. Our Chinese competition isn't
4 exposed to these same pressures.

5 **Q IS PRICE CERTAINTY AND STABILITY IMPORTANT TO**
6 **MONSANTO'S DECISION-MAKING PROCESS.**

7 A Price certainty and stability are very important to Monsanto. Monsanto is not a
8 monopoly nor does it have the opportunity to earn a guaranteed rate of return on
9 its investments. The Soda Springs plant is a capital-intensive facility.
10 Phosphorus production requires long-term planning and millions of dollars of
11 capital investment. Also, because most of our work force needs to be highly
12 skilled, it takes years of training and development to maximize the value of our
13 people.

14 New investments are needed to develop ore deposits for the future and
15 install the next generation of environmental equipment to ensure compliance with
16 ever more stringent environmental regulations, a cost our Chinese competitors do
17 not have. To justify these investments, Monsanto must be able to have reasonable
18 assurance that Soda Springs can remain in a competitive cost position.

19 Unfortunately, price certainty and stability has not existed in recent years as
20 a result of regular and substantial rate increases from PacifiCorp, as described in
21 the testimony of Kathryn E. Iverson.

1 **Q IS MONSANTO CONCERNED ABOUT PACIFICORP'S PLANS TO**
2 **MAKE MASSIVE MULTI-BILLION DOLLAR INVESTMENTS IN**
3 **RENEWABLE RESOURCES AND TRANSMISSION?**

4 A Most certainly. We are not convinced that these investments will deliver any value
5 to the people of the State of Idaho nor do we believe that they are needed. We fully
6 support the rate making principle of cost causation. Those who cause a particular
7 cost to be incurred should be the ones that pay for it. However, the current revised
8 protocol allocation methodology continues to allocate costs to Idaho that were not
9 caused by Idaho customers. We suggest that the Commission take special
10 consideration prior to approving any piece of a multi-billion investment which has
11 a 40-50 year lifespan, and undertake a significant review of revised protocol in the
12 upcoming case to make sure Idaho customers are not paying for cost increases
13 driven by policies and growth in other jurisdictions. In recently filed allocation
14 case, PAC-E-10-09, we urge the Commission to scrutinize which states are driving
15 the need for the Energy Gateway transmission project and new resource
16 investments, carefully evaluate the resulting rate impacts for Idaho consumers now
17 and into the future and determine if Idaho should pay for these costs.

18 **Q CAN MONSANTO PASS ON SIGNIFICANT INCREASED COSTS AS**
19 **PROPOSED IN THIS CASE?**

20 A No, we can't. The Chinese competition is setting the global price of glyphosate and
21 we do not expect the price to increase for the foreseeable future. In addition,
22 herbicide customers have made it abundantly clear that they will purchase the least

1 cost product available in the marketplace. We can't pass on any new costs that
2 aren't also a burden for our competition.

3 **Q IS MONSANTO CONSIDERING SHUTTING DOWN THE SODA**
4 **SPRINGS PLANT AS A RESULT OF THE PRICE INCREASES**
5 **PROPOSED BY ROCKY MOUNTAIN POWER IN THIS CASE?**

6 A No, we aren't at the current time. We are fully committed to meeting the needs of
7 our customers. We also currently believe that the Soda Springs plant is a key link
8 in our supply chain. However, this filing (and the additional filings expected over
9 the next few years) seriously threaten our ability to meet our customers' needs
10 and maintain the long-term viability of the Soda Springs plant. We are dedicated
11 to continue to work with the utility and the Idaho Commission to develop a long-
12 term solution which will allow us to successfully compete in our marketplace over
13 the long term. We believe the proposal that Ms. Iverson is recommending in her
14 testimony will help accomplish this objective.

15

16 **Q DOES THIS CONCLUDE YOUR TESTIMONY?**

17 A Yes.

18