COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In The Matter Of:	:	
	:	**Case No. 2014-000371**
Application Of Kentucky Utilities Company For An Adjustment Of Its Electric Rates	:	
	:	
	:	

DIRECT TESTIMONY OF MARY JEAN RILEY ON BEHALF OF NORTH AMERICAN STAINLESS

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Mary Jean Riley. I am the Vice President - Finance & Administration & Treasurer of North American Stainless ("NAS"). My business address is 6870 Highway 42 East Ghent, KY 41045.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I was graduated from the University of Louisville with a Bachelors of Science in Business Administration and have been a Certified Public Accountant for over 20 years.

Q. ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A. I am appearing on behalf of NAS. Founded in 1990, NAS has undertaken several phases of expansion to become the only fully integrated stainless steel producer in the U.S. NAS directly employs about 1300 people at its Carol County facility, and over 500 contractors are indirectly employed on an ongoing basis there. These are high-paying, family supporting jobs that contribute multiples of their direct salary to the economy of the Commonwealth.

NAS is a member of Kentucky Industrial Utilities Customers, Inc. ("KIUC") and is served under the Curtailable Service Rider CSR10 by Kentucky Utilities Company ("KU").

Q. WHAT ATTRACTED NAS TO CAROL COUNTY KENTUCKY?

A. NAS built its state-of-the-art production facility on 1400 acres in Carroll County for several reasons. The facility is ideally located near a major interstate highway and with direct access to the Ohio River. Kentucky's traditionally low electric prices were another major factor in selecting the Carroll County location.

Q. WHAT PORTION OF NAS's LOAD IS CURTAILABLE?

A. NAS operates two, 100 MW Electric Arc Furnaces at its Carroll County facility. These Furnaces are ideal for providing KU with a large block of capacity during system emergencies because they can be quickly and safely shut down. The current CSR10 tariff provides that NAS's curtailable load can be shut down on only 10 minutes notice.

Q. WHAT IS KU'S PROPOSAL REGARDING CURTAILABLE SERVICE IN THIS PROCEEDING?

A. KU is proposing to change the terms of CSR10 by allowing it to physically interrupt NAS's Melt Shop furnaces for 100 hours per year for no reason or for any reason, for periods ranging from a minimum of 30 minutes to a maximum of 14 hours per interruption, and up to twice per calendar day. The current CSR tariff allows KU to physically interrupt CSR customers only for system reliability events (e.g. emergencies).

Q. IF KU IS AUTHORIZED TO SHUT DOWN THE STEEL MAKING OPERATIONS OF NAS FOR UP TO 100 HOURS PER YEAR EVEN WHEN THERE IS NO SYSTEM RELIABILITY REASON TO DO SO, HOW WOULD THAT IMPACT NAS?

A. Allowing KU to shut down our steel making operations up to 100 hours (200 times per year in one half hour increments) even when there is no system reliability reason to do so would result in an abrupt change to NAS's operations, would increase NAS's costs, reduce its ability to produce its product safely, reduce its competitive profile in the

stainless steel manufacturing market world-wide, and therefore would be extremely detrimental to NAS's business plan.

NAS understands that it will sometimes be called on to physically interrupt its steel making operations in an emergency or when the load on the system is overly constrained. We are ready and able to provide system reliability benefits during those emergency situations as required under the current CSR tariff. But forcing us to stop making steel up to 200 times per year when there is no system reliability reason to do so is a drastic change from the status quo and is not reasonable.

Q. PLEASE DESCRIBE THE MARKET THAT NAS COMPETES IN.

A. NAS competes in a world-wide market to sell stainless steel. NAS's competitors include countries like China, which heavily subsidizes its manufacturing industries with substantial incentives including cheap electrical power. Closer to home, one of NAS's competitors in Alabama enjoys a substantially below-market electric rate as part of its incentive package to locate there. Allowing KU to physically shut down our operations during non-emergency periods would reduce NAS's ability to compete against these and other stainless steel manufacturers, who enjoy substantial support from their electrical utilities.

Q. HOW WOULD PHYSICALLY SHUTTING DOWN YOUR ELECTRIC ARC FURNACES FOR 100 HOURS PER YEAR GENERALLY AFFECT THE OPERATIONS OF NAS?

A. Broadly speaking, 100 hours of interruption at NAS's two electric arc furnaces translates into the loss of NAS's ability to produce 15,000 tons of stainless steel annually. NAS's furnaces are capable of producing one million (1,000,000) tons of steel annually, so the losses to curtailment can be as high as one and one-half percent (1.5%) of NAS's productive capacity. The financial effects of the loss of that much productive capacity multiply throughout NAS's business: There are fewer tons produced by NAS to which it

can allocate its fixed costs of plant and equipment, resulting in substantially higher costs per ton and an overall increase in the critically important accounting for cost of goods sold. There are fewer tons available for NAS to sell, reducing its income and its ability to provide a return on the investment of its parent company. Finally, reduced income translates into the need to reduce costs, including labor costs. Reduced labor costs translate into fewer of some of the highest paying jobs both for NAS employees and contractors in our area of the Commonwealth.

Q. WOULD PERSISTENT PHYSICAL INTERRUPTIONS OF YOUR ELECTRIC ARC FURNACES ADVERSELY AFFECT YOUR EQUIPMENT?

A. Yes. Shutting down our Melt Shop operations up to 200 times per year when there is no system reliability reason to do so would result in substantially higher costs in maintenance and repair of NAS's equipment. Frequent stops and starts are stressful to NAS's electrical equipment and result in the need for more frequent replacement of components. One of the most sensitive pieces of electrical equipment is the static var compensator (SVC) unit which NAS was required by to install. During the last KU rate case, KU altered the non-compliance penalty measurement methodology for CSR10 from kilowatt (power) demand to kilovolt amps (reactive energy), resulting in a greater risk of NAS incurring compliance penalties payable to KU in the hundreds of thousands of dollars. As a result of this alteration NAS must completely power off its static-var compensator (SVC). Each time the SVC unit is powered up and down, the strain on its component insulators and capacitors creates a risk of failure and reduced component life. NAS's SVC unit is a very expensive, custom made unit requiring significant lead time to order and to install – time during which NAS's Melt Shop operations would not be operational. The more curtailment episodes that KU demands, the greater is the risk of failure of the SVC.

Molten steel at a temperature of around 3000 degrees must be held in vessels (furnaces and ladles) lined with refractory brick during periods of curtailment. Molten steel loses its heat very quickly. Holding the molten steel in those vessels reduces the life of the

refractory brick liners, requiring replacement of the lining more often than would otherwise be the case. Refractory linings are among the highest costs of steel production.

Q. WOULD ABRUPTLY SHUTTING ON AND OFF YOUR ELECRTRIC ARC FURNACES RAISE SAEFTY CONCERNS?

A. Yes. Let me first say that our Melt Shop operators are trained to safely handle unexpected outages of the furnaces. Our operators can and will safely interrupt our Melt Shop operations during system reliability events as required under the current CSR Rate.

While considering the issues of handling 3,000 degree molten steel it is necessary to emphasize the most important aspect of NAS's operations – the safety of people. Molten steel is an inherently dangerous product that must be handled carefully and consistently under the best of circumstances. Notwithstanding the best efforts of any manufacturer, occasionally the molten steel breaks through the refractory brick vessel liners, resulting in what the industry refers to as a 'break-out.' Curtailments that occur during the melting and production cycle decrease the predictability of NAS's handling processes and thereby increase the risk of a break-out. In addition to the clearly increased risks of unthinkable personal injury, the obvious risks posed to plant and equipment are also worth mentioning.

Q. WOULD KU'S PROPOSAL TO SHUT DOWN YOUR OPERATIONS DURING NON-EMERGENCY CONDITIONS FOR UP TO 100 HOURS PER YEAR ADVERSELY AFFECT THE PLANT'S PRODUCTIVITY AND THE QUALITY OF STEEL MADE IN KENTUCKY?

A. Yes. Should a curtailment continue for long enough, NAS may be forced to spoil the steel in mid-production by pouring it out of its vessel before it solidifies, resulting in the loss of the electrical energy that went into heating it, the loss of the product for that production cycle, the costs of re-handling the spoiled product, which must be cut up and re-melted. Pouring the molten steel out of the furnaces under curtailment conditions often

results in breaking the 10-foot-long graphite electrodes used to heat the steel. Each of these losses and additional steps is very costly and further reduces NAS's productivity and competitive capacity, and results in additional down-time for maintenance in NAS's Melt Shop over and above the curtailment hours themselves.

The quality of NAS's products depends on the ability of NAS's operators to consistently move the products through the production cycle. Frequent stops and starts result in uneven application of heat energy to the product, can vary holding times in the heating cycle and thereby adversely affect the quality of NAS's products. Adversely affected products are more difficult to form, roll and surface treat in subsequent manufacturing processes, and the final product may perform differently than customers may expect. Each of these quality issues results in increased costs to NAS and a corresponding reduction in NAS's ability to compete in its markets.

The bottom line is that KU's proposal will weaken NAS's ability to compete in the highly competitive stainless steel market world-wide and thereby weaken the Kentucky economy.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes

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AFFIDAVIT OF MARY JEAN RILEY

STATE OF KENTUCKY)
) *SS*
COUNTY OF CARROLL)

Mary Jean Riley being first duly sworn deposes and states that:

1. She is Vice President – Finance & Administration and Treasurer of North American Stainless;

2. She is the witness who sponsors the accompanying testimony entitled "Direct Testimony of Mary Jean Riley;"

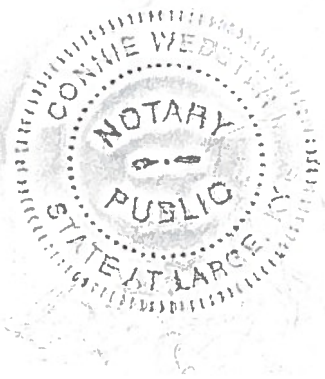
3. Said testimony was prepared by her and under her direction and supervision;

4. If inquiries were made as to the facts in said testimony she would respond as therein set forth; and

5. The aforesaid testimony is true and correct to the best of her knowledge, information and belief.

Mary Jean Riley

Subscribed and sworn to or affirmed before me this 4th day of March, 2015, by Mary Jean Riley.



Connie Webster # 497879
Notary Public