

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

Illinois Commerce Commission	:	
On Its Own Motion	:	
	:	
vs.	:	
	:	
United States Steel Corporation,	:	
Respondent	:	Docket No. 10-0635
	:	
Determination under Section 5 of the Illinois Gas	:	
Pipeline Safety Act of the plan USS is to have in	:	
place for the inspection and maintenance of its	:	
pipeline facilities in and near its Granite City	:	
Works.	:	

Direct Testimony of

GREGORY J. BAKER

Area Manager – Energy and Ironmaking Utilities

United States Steel Corporation

August 12, 2011

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1 **I. INTRODUCTION**

2 **A. Identification of Witness**

3 **Q. What is your full name and business address?**

4 A. My name is Gregory J. Baker. My business address is 1951 State Street, Granite City,
5 Illinois 62040.

6 **Q. By whom and in what position are you employed?**

7 A. I am employed by United States Steel Corporation (“USS” or “U. S. Steel” or the
8 “Company”) as Area Manager, Energy and Ironmaking Utilities for Granite City Works
9 (“GCW”), a division of U. S. Steel.

10 **B. Background and Experience**

11 **Q. What are your duties in your position with the Company?**

12 A. I have managerial responsibility for all of the energy and utilities purchased or produced
13 at GCW, including operation of the GCW utilities distribution systems. The Company’s
14 Energy and Ironmaking Utilities (“EIU”) Department is responsible for the production of
15 steam and compressed air, electrical generation, and the piping, conduit, and wires which
16 provide fuels, waters, steam, gases and electricity to the various production operations
17 and buildings at GCW. As Area Manager, Energy and Ironmaking Utilities, I am
18 responsible for the supervision of the employees that are required to operate the
19 department. There are currently 58 employees working in the EIU Department at GCW.
20 Six of these employees have engineering degrees and three of the six are licensed
21 professional engineers. I also work with internal and external maintenance forces to
22 coordinate maintenance of the equipment. The EIU Department is the liaison with
23 external public utility companies and suppliers.

24 **Q. What is your educational background?**

25 A. I received a Bachelor of Science in Mechanical Engineering degree from the University
26 of Missouri – Rolla in December 1978.

27 **Q. What is your professional background?**

28 A. I joined National Steel Corporation (“NSC”), Granite City Steel, in January of 1979. In
29 May of 2003, U. S. Steel purchased certain assets from NSC including the land,
30 buildings, and equipment then constituting NSC Granite City Steel works, and I became
31 an employee of U. S. Steel at that time. From the start of my career I have worked within
32 the Energy and Utilities Department. I have held several positions including Combustion
33 Engineer, Steam and Compressed Air Engineer, Process Coordinator – Energy and
34 Manager – Energy until I was promoted to my current position in April of 2009.

35 **C. Purpose and Conclusions of Testimony**

36 **Q. What is the purpose of your testimony?**

37 A. My direct testimony responds to the direct testimony of Illinois Commerce Commission
38 (“Commission”) Staff (“Staff”) witness Darin Burk (ICC Staff Ex. 1.0) regarding Staff’s
39 attempted assertion of jurisdiction over unspecified portions of the natural gas piping and
40 the coke oven gas piping at U. S. Steel’s steelmaking plant in Granite City, Illinois,
41 known as Granite City Works. I describe the natural gas piping and the coke oven gas
42 piping, and identify various omissions, misstatements and errors in Mr. Burk’s
43 description of those fuel lines. I describe GCW’s safety practices relative to the fuel
44 lines. I then review and respond to various assertions by Mr. Burk, including his
45 conclusion that these GCW fuel lines involve the transportation of gas over which the
46 Commission has jurisdiction.

47 **Q. Please summarize your conclusions.**

48 A. Staff's attempt to assert jurisdiction over certain GCW facilities is unreasonable and
49 should be rejected. This statement is based upon several facts, summarized as follows:

50 ➤ GCW is a single, unified steelmaking facility located on contiguous property through
51 which a few streets and one highway run. The area in and near GCW is a sparsely
52 populated heavy industrial area. GCW operates low stress gas lines to move fuel
53 throughout its production operation.

54 ➤ Staff is attempting to assert jurisdiction over GCW's natural gas and coke oven gas
55 fuel lines in the absence of a demonstrated potential or actual safety risk. GCW came
56 to the attention of the Commission Staff only by virtue of small releases of benzene
57 self-reported by GCW to the National Response Center in compliance with the
58 environmental laws. There have been no events at GCW which would constitute a
59 reportable event under the Illinois Pipeline Safety Act or federal pipeline safety laws.

60 ➤ GCW is an end user of natural gas. GCW does not sell natural gas to any other
61 person or entity. GCW has four connections to the interstate pipeline from which it
62 may receive natural gas. GCW actively receives gas at just two of those connections,
63 but receives over 96% of the natural gas it consumes at just one of the connections.
64 Further, the natural gas fuel lines at GCW are not fully interconnected. Rather, most
65 of the natural gas consumed at GCW never enters a fuel line in a public place.

66 ➤ GCW's natural gas fuel lines do not contain gas in transportation. The fact that a
67 small portion of some of the fuel lines cross a street or run along a public right of way
68 for short distances between plant buildings does not change the fact that the gas is not
69 in transportation.

- 70 ➤ The coke oven gas (“COG”) fuel lines at GCW do not contain gas in transportation.
71 Coke oven gas is a byproduct of the coke making process at GCW, and the vast
72 majority of coke oven gas is consumed at GCW without ever entering a fuel line that
73 enters a public area. The fact that a small portion of some of the COG fuel lines cross
74 a street or run along a public right of way for short distances does not change the fact
75 that the gas is not in transportation.
- 76 ➤ Staff is attempting to assert jurisdiction over a new category of pipelines, namely fuel
77 lines, associated with manufacturing operations. The Department of Transportation,
78 Pipeline and Hazardous Materials Safety Administration (“PHMSA”) does not
79 regulate such lines. There is no jurisdiction over natural gas fuel lines after delivery
80 of the gas has occurred. Both the natural gas fuel lines and the coke oven gas fuel
81 lines are in-plant piping with short sections less than 1 mile in length entering public
82 areas, and have not been regulated by PHMSA. There are no separate state
83 regulations that support Staff’s attempt to assert jurisdiction.
- 84 ➤ Staff’s reliance on certain conclusions in a PHMSA interpretation letter is misplaced,
85 and the PHMSA letter’s conclusions are unreliable. PHMSA’s conclusions are based
86 on incorrect factual assertions, as presented to PHMSA by Staff, which do not reflect
87 actual operating conditions at GCW. Staff also disregards PHMSA’s conclusions
88 finding certain facilities to be non-jurisdictional.

89 **D. Itemized Attachments**

90 **Q. Are there any exhibits to your testimony?**

91 A. Yes, they are as follows:

- 92 (1) USS Ex. 1.1P (Public) and USS Ex. 1.1C (Confidential) are drawings depicting
93 the approximate location of the natural gas piping at Granite City Works. USS
94 Ex. 1.1P depicts the approximate location of the natural gas piping in public areas.
95 USS Ex. 1.1C depicts the approximate location of the natural gas piping in public
96 areas and on GCW property, and has been designated as Confidential by U. S.
97 Steel.
- 98 (2) USS Ex. 1.2P (Public) and USS Ex. 1.2C (Confidential) are drawings depicting
99 the approximate location of the COG piping at Granite City Works. USS Ex.
100 1.2P depicts the approximate location of the COG piping in public areas. USS
101 Ex. 1.2C depicts the approximate location of the COG piping in public areas and
102 on GCW property, and has been designated as Confidential by U. S. Steel.
- 103 (3) USS Ex. 1.3 is a March 9, 2009, letter from Mr. Darin Burk, the Manager of the
104 Commission's Pipeline Safety Program, to Mr. Keith Erickson, University of
105 Illinois, and related correspondence produced by Staff in response to U. S. Steel
106 Data Request USS-Staff 1.08.
- 107 (4) USS Ex. 1.4 is a group exhibit containing correspondence between PHMSA and
108 Staff produced in Staff's Responses to U. S. Steel Data Requests USS-Staff 1.11
109 and 1.13.
- 110 (5) USS Ex. 1.5 is a copy of e-mail communications dated September 24, 2009 and
111 October 1, 2009 between Kathryn M. Scotti with U. S. Steel and Richard Favoriti
112 and Pat Foster with Commission Staff regarding U. S. Steel's request to
113 participate in the dialogue with PHMSA.

114 **II. DESCRIPTION OF GRANITE CITY WORKS AND THE NATURAL GAS AND**
115 **COKE OVEN GAS PIPING**

116 **A. Granite City Works**

117 **Q. What is Granite City Works?**

118 A. Granite City Works is U. S. Steel's facility in Granite City, Illinois that engages in
119 steelmaking, finishing, and coke production. GCW is a leading supplier of high-quality
120 hot-rolled, cold-rolled and coated sheet steel products to customers in the construction,
121 container, piping and tubing, service center, and automotive industries. GCW has an
122 annual raw steelmaking capability of 2.8 million net tons. GCW has approximately 2,300
123 employees, and is the largest single employer in Granite City, Illinois. While U. S. Steel
124 acquired the assets constituting GCW in 2003, Granite City Steel was originally
125 constructed in 1878.

126 **Q. What operations are located at GCW?**

127 A. The following production operations are located at GCW:

- 128 • Two coke batteries – approximate annual production capability of 500,000 tons
129 (Cokemaking)
- 130 • Two blast furnaces (Ironmaking)
- 131 • Two top-blown basic oxygen process (BOP) vessels (Steelmaking)
- 132 • Ladle metallurgy furnace (Steelmaking)
- 133 • Two continuous slab casters (Steelmaking)
- 134 • 80" Hot strip mill (Hot Rolling)
- 135 • 51" Pickle Line (Finishing)
- 136 • 56" 4-Stand cold reduction mill (Finishing)
- 137 • 46" Hot-dip galvanizing line (Finishing)

- 138 • 49" Hot-dip galvanizing/GALVALUME® line (Finishing)
- 139 • Barge dock on Mississippi River (Ancillary)
- 140 • Ancillary support services and buildings (Utility Operations)

141 **Q. What is the physical size and configuration of the GCW facility?**

142 A. GCW covers approximately 1,313.6 acres (2.053 square miles) of property located on the
143 Southwest side of Granite City, Illinois. The boundaries of GCW are somewhat irregular,
144 but GCW is generally bounded by Madison Avenue from approximately 15th Street to
145 20th Street; then 20th Street from Madison Avenue to Lee Avenue; then Lee Avenue from
146 20th Street to 21st Street; then 21st Street from Lee Avenue to Monroe Street; then Monroe
147 Street from 21st Street to 23rd Street; then 23rd Street from Monroe Street to Nameoki
148 Road; then Nameoki Road from 23rd Street to Edwardsville Road; then Edwardsville
149 Road from Nameoki Road to Edna Street (approximately), then a large area south of
150 Edwardsville Road that runs southeast from Edwardsville Road and Edna Street
151 approximately 635 feet; then generally southwest and then west (increasing to a point
152 approximately 1,335 feet southwest of Edwardsville Road) to a point approximately 900
153 feet west of 20th Street at Edwardsville Road; then west across Edwardsville Road on a
154 line generally parallel to and northeast of 14th Street to a point near Washington Street;
155 then northwest to 15th Street and Madison Avenue.

156 While all of the above-described property is contiguous, there are a few parcels
157 within this area not owned by GCW, as follows:

- 158 ➤ A triangular shaped parcel on the north side of Edwardsville Road, starting
159 on the west side of Nameoki Road, owned by Ameren Corporation.

- 160 ➤ A triangular shaped parcel on the south side of Monroe Street, from E 22nd
161 Street to E 23rd Street, owned by Air Products Manufacturing, Inc.
- 162 ➤ An irregular shaped parcel east of 21st Street along Edwardsville Road.
163 This parcel is used for coke production by SunCoke Energy Inc. GCW
164 owns a strip of land running between this parcel and Edwardsville Road
165 and 21st Street. In other words, the SunCoke parcel is surrounded by
166 property owned by GCW.
- 167 ➤ A triangular parcel at Edwardsville Road and 21st Street.
- 168 ➤ Two lots on 21st Street containing single family residences.
- 169 ➤ A lot on Park Avenue containing a single family residence.
- 170 ➤ One unimproved lot and one lot with a single family residence along 20th
171 Street.
- 172 ➤ An unimproved strip of land south of Edwardsville Road between 20th
173 Street and 21st Street.

174 The approximate locations of the above-described property lines of GCW and
175 parcels not owned by GCW are depicted in the satellite image/map shown below:



176

177 **Q. Do you have any other general comments about GCW property?**

178 A. Yes. Google and other map services may show several east-west streets running between
 179 20th Street and 21st Street from Edwardsville Road to Lee Street. Only Park Avenue is an
 180 actual public street. The other streets, including Sherman Street, Russell Street, Quincy
 181 Street, Omaha Street, and Nash Street, have been vacated by the city of Granite City and
 182 conveyed to U. S. Steel. In other words, they are U. S. Steel property and not public
 183 streets.

184 **Q. Is GCW an integrated steel mill?**

185 A. Yes. GCW is a single integrated steel mill under the direction and control of a single
 186 general manager. GCW's major operating equipment includes two coke oven batteries
 187 and associated by-product equipment, two blast furnaces, two basic oxygen furnaces, two

188 continuous casters, four slab reheat furnaces and rolling mill, two continuous annealing
189 and coating lines, three boilers and one turbine generator. The end products are hot
190 rolled, cold rolled, or coated coil steel as desired by customers.

191 **B. U. S. Steel Safety Practices**

192 **Q. Describe the U. S. Steel safety program.**

193 A. At U. S. Steel, safety is a Core Value and is the first order of business conducted. We
194 believe that ALL incidents and injuries can be prevented. Everyone, at all levels, is
195 committed to working safely. We have established programs to review safety
196 information on a daily basis, have monthly safety meetings, review safety videos, and
197 assign special contacts on incidents.

198 **Q. Please describe the basic safety activities followed by GCW.**

199 A. Safety activities followed by GCW include:

- 200 ➤ Patrols – The South Plant Line described later in my testimony is patrolled every
201 three months by foot patrol. General plant pipelines are in heavily traveled areas.
- 202 ➤ Leak Surveys – The natural gas and coke oven gas fuel lines both inside and
203 outside GCW property are Leak Surveyed with instruments once a year.
204 Currently, the COG lines located in public areas described below are Leak
205 Surveyed weekly.
- 206 ➤ Cathodic Protection -- Cathodic Protection is installed on all underground natural
207 gas and COG pipes described below. The rectifiers are inspected every two
208 months for proper operation. The cathodic protection systems are tested annually.
- 209 ➤ Leaks – Releases of gas that are detected by GCW personnel (by smell) or leak
210 surveyors (by instrument) are classified and responded to as appropriate to the

211 classification. Coke oven gas releases are reported to the National Response
212 Center as required due to reportable constituents. When a pipe is excavated to
213 locate a leak and the leak has been identified, the line is isolated and purged and
214 then a length of pipe is cut out and replaced.

215 ➤ Inspections and Repairs -- If a pipe is exposed for any reason, the condition of the
216 pipe is inspected and documented for future reference. Repairs are completed in a
217 timely manner by outside contractors with qualified crafts people or by GCW
218 personnel with the required skills.

219 ➤ Pipeline Markers -- GCW pipelines inside and outside GCW property are
220 identified with pipeline markers. These markers identify the locations of water
221 and gasses. Each marker is within sight of the next marker. They identify the
222 pipe contents, and give contact information.

223 ➤ JULIE -- U. S. Steel Granite City Works has been a member of JULIE – the
224 Illinois One Call System- since October 2007. The locate requests are based on
225 polygons specifying the location of GCW utilities. The locate requests are
226 received by our Utility Dispatcher which is staffed 24 hours a day.

227 ➤ Excavation Permits - A professional locating service is retained to locate
228 underground utilities inside and outside the GCW property. The utilities located
229 include communications, electric, gasses, water and sewers. The professional
230 locating service works with us to issue the required excavation permit for any
231 excavation including excavations performed by contractors. This permit is
232 required whether or not utilities are believed by GCW personnel to be present.

233 **Q. Please describe GCW's involvement with JULIE.**

234 A. We continue to maintain our membership in JULIE. We have a relatively small number
235 of JULIE calls for our facility. GCW became a member of JULIE to alert GCW to
236 excavation activities near our 54" water line from GCW's river pumping station to
237 GCW's reservoir.

238 **Q. Has U. S. Steel ever had an incident with respect to its natural gas pipes or its COG**
239 **pipes that resulted in gas loss greater than 3,000,000 ft³, death or personal injury**
240 **necessitating in-patient hospitalization, or property damage of \$50,000 or more?**

241 A. No.

242 **Q. Does U. S. Steel have other specific safety procedures in place that affect its pipes?**

243 A. Yes. Granite City Works has Safe Work Practices ("SWPs") that would apply to the
244 GCW pipes. GCW has its own Security Department that patrols areas inside, outside,
245 and around Granite City Works property. If the Security Department noticed any unusual
246 events, odors or activities during their patrols, appropriate actions would be taken to
247 address the situation.

248 **Q. Please explain more about the SWPs.**

249 A. There are two SWPs that directly apply to the operation of the pipes. The first is SWP
250 XI-A Identification of Piping. This deals with the color coding and labeling of utility
251 piping within GCW. The second is SWP XI-B Trenching and Excavation. This
252 procedure deals with excavation and the requirement to locate and identify any
253 underground utilities prior to the start of any excavation. There are numerous other
254 SWPs that address safety practices to minimize the risk to our employees and equipment.
255 We have established engineering guidelines regarding the installation of piping for the

256 facility. These are based upon codes and standards from ASME, API and CGA just to
257 list a few.

258 **Q. Are there additional SWPs that support GCW's safety program?**

259 A. Yes. There are numerous SWPs as part of GCW's comprehensive safety program. Of
260 critical importance are the SWPs that address life threatening hazards within GCW.
261 Some examples of programs addressing life threatening hazards are energy control (SWP
262 II-A), fall protection (SWP II-G), confined space entry (SWP II-J), and working near
263 railroad tracks (SWP II-E).

264 **C. Natural Gas Piping**

265 **1. Overview**

266 **Q. How does GCW receive natural gas?**

267 A. Granite City Works receives natural gas from Center Point Energy – Mississippi River
268 Transmission Corporation (“MRT”), an interstate pipeline. GCW is connected to MRT at
269 four delivery points. However, only two of these MRT delivery points are used to
270 actively deliver natural gas to GCW. For ease of identification, I will refer to the MRT
271 delivery points as MRT-1, MRT-2, MRT-3, and MRT-4. These are not official MRT
272 designations.

273 The majority of the natural gas is delivered to GCW at MRT-1 located on GCW
274 property on the south¹ side of Edwardsville Road near 20th Street. The other active
275 delivery point is MRT-2 located on GCW property roughly 1,500 feet south of August

¹ Many of the streets and roads in Granite City, Illinois run at angles (e.g., southwest to northeast or northwest to southeast) and do not run true north/south or east/west. For ease of reference, the directional notations in my testimony generally refer to the predominant direction of the street or road (e.g., treating Edwardsville Road as an east/west road).

276 Avenue and 23rd Street. One of the two non-active MRT delivery points is MRT-3
277 located on GCW property near 23rd Street and Monroe Street. MRT-3 is normally
278 turned off, but can be turned on as an alternative source on an interruption of natural gas
279 from MRT-1. For MRT-3 to be turned on or activated requires both MRT and GCW to
280 open their separate valves. The second non-active MRT deliver point is MRT-4 located
281 within a GCW building on private property west of 16th Street and north of Cleveland
282 Blvd. where 16th Street changes directions. MRT-4 is normally turned off, but can be
283 turned on as an alternative source on an interruption of natural gas from MRT-1. For
284 MRT-4 to be turned on or activated requires both MRT and GCW to open their separate
285 valves. The GCW customer owned piping starting at the GCW building on private
286 property and ultimately entering GCW property at 16th Street and Madison Avenue has
287 been referred to by Staff as the “South Plant Line.”² The MRT-3 and MRT-4 delivery
288 points are only for use during situations where the gas normally received at MRT-1 is
289 disrupted or unavailable for some reason. The last time either of these delivery points
290 was used occurred during the summer of 2005, with a total quantity of gas delivered of
291 356 mmBtu.

292 The following is a satellite image/map of GCW showing the approximate
293 locations of the MRT delivery points and GCW’s property lines:

² Staff Ex. 1.0, 5:106.



294

295 **Q. Where does delivery of the natural gas occur?**

296 A. The point of delivery is the outlet side of MRT's piping connecting to GCW customer
297 owned piping. The control and possession of gas passes to GCW when the gas enters
298 GCW piping. The natural gas entering GCW's piping is then supplied to the various
299 production operations and ancillary buildings within Granite City Works. All MRT
300 facilities connect directly to the Granite City Works customer owned piping.

301 Granite City Works is a unified operation. As part of a unified integrated steel
302 mill operation, there are portions of the Granite City Works that perform different
303 steelmaking processes in the production of steel. Such processes can generally be
304 identified as Cokemaking, Ironmaking, Utility Operations, Steelmaking, Hot Rolling, and

305 Finishing. The natural gas is supplied through GCW customer owned piping to each of
306 these processes. All of these processes are owned and operated by Granite City Works.

307 **Q. Are there any sections of GCW property where Cokemaking, Ironmaking, Utility**
308 **Operations, Steelmaking, Hot Rolling, and Finishing occur that are not contiguous?**

309 A. All property where Cokemaking, Ironmaking, Utility Operations, Steelmaking, Hot
310 Rolling and Finishing, occur are located on contiguous property. GCW does have several
311 parcels that are not contiguous with the property where the above-described operations
312 occur, but none of them consume natural gas or coke oven gas. A few examples are the
313 River Pumping Station, River Dock, and General Office building.

314 **2. MRT-1**

315 **Q. Please describe the GCW pipes connecting to the MRT-1 delivery point.**

316 A. MRT has one metering station, two sets of pressure regulators, and related valves and
317 piping at MRT-1. Pressure is delivered at 150 psig. GCW owns and operates two natural
318 gas pipes connecting to the MRT-1 delivery point. While these pipes both connect to
319 MRT-1, they are not connected to each other. GCW has no control over MRT's delivery
320 point piping, and cannot direct gas from one GCW pipe to the other.

321 The first GCW pipe connecting to MRT-1, which I'll designate as NG Pipe "A",
322 is an underground pipe that runs east from MRT-1 on GCW property parallel to and
323 south of Edwardsville Road. NG Pipe A does not enter into or cross any public roads or
324 right of ways, is located in its entirety south of Edwardsville Road, and supplies natural
325 gas to Cokemaking, Ironmaking, Utility Operations, and ancillary buildings located on
326 GCW property south of Edwardsville Road. The second GCW pipe connecting to MRT-
327 1, which I'll designate as NG Pipe "B", is an underground pipe that runs west from

328 MRT-1 on GCW property parallel to and south of Edwardsville Road. NG Pipe B turns
329 northwest near the GCW Storeroom Gate, leaving GCW property, crosses beneath
330 Edwardsville Road for approximately 64 feet (0.01 miles), and reenters GCW property
331 north of Edwardsville Road. GCW property borders both sides of Edwardsville Road
332 where this crossing occurs. This is the only public crossing made by NG Pipe B. After
333 reentering GCW property on the north side of Edwardsville Road, NG Pipe B supplies
334 natural gas to Hot Rolling and ancillary buildings located on GCW property south of
335 Madison Avenue between 15th and 20th Streets.

336 NG Pipe B supplies a separate branch pipe, which I will designate as NG Branch
337 Pipe “C”, at a connection point located approximately in the middle of the GCW property
338 between Edwardsville Road and Madison Avenue. NG Branch Pipe C runs directionally
339 east supplying natural gas to Steelmaking and ancillary buildings before reaching 20th
340 Street. NG Branch Pipe C leaves GCW property at 20th Street, crosses beneath 20th Street
341 for approximately 59 feet (0.01 miles), and re-enters GCW property located between 20th
342 and 21st Streets. While still running directionally east, NG Branch Pipe C leaves GCW
343 property, crosses beneath 21st Street for approximately 60 feet (0.01 miles), and re-enters
344 GCW property east of 21st Street. NG Branch Pipe C then turns directionally north on
345 GCW property, running parallel to and east of 21st Street. NG Branch Pipe C ends at a
346 tee and supplies natural gas to a Finishing process that is no longer in service and
347 ancillary buildings. GCW property borders both sides of 20th and 21st Streets where NG
348 Branch Pipe C crosses those streets.

349 NG Branch Pipe C supplies a separate branch pipe at the tee where it ends, which
350 I will designate as NG Branch Pipe “D.” NG Branch Pipe D leaves GCW property in a

351 northwest direction, crosses beneath 21st Street for approximately 72 feet (0.01 miles) and
352 re-enters GCW property located between 21st and 20th Streets. While on GCW property
353 NG Branch Pipe D turns in a westerly direction and continues on to a GCW building
354 located approximately halfway between 21st and 20th Streets, where the pipe is then
355 located above ground. At this point the pressure in NG Branch Pipe D is reduced to a
356 nominal 50 psig. NG Branch Pipe D continues in a westerly direction from this GCW
357 building, entering another GCW building that borders on the east side of 20th Street. NG
358 Branch Pipe D exits this GCW building underground, continues in a westerly direction,
359 crosses beneath 20th Street for approximately 59 feet (0.01 miles) and re-enters GCW
360 property to supply natural gas to Steelmaking, Finishing, Hot Rolling and ancillary
361 buildings. GCW property borders both sides of 20th and 21st Streets where NG Branch
362 Pipe D crosses those streets.

3. MRT-2

363
364 **Q. Please describe the GCW pipe connecting to the MRT-2 delivery point.**

365 A. MRT has one metering station and related valves and piping at MRT-2, but no pressure
366 regulator. Pressure is delivered at 180 psig. MRT-2 is located on GCW property. GCW
367 owns and operates a single natural gas pipe connecting to MRT-2, which I'll designate as
368 NG Pipe "E", and is an underground pipe. NG Pipe E is located entirely on GCW
369 property north of Edwardsville Road and east of 21st Street, and ends at a GCW
370 regulating station which supplies natural gas to Utility Operation and ancillary buildings.
371 At this point the pressure is reduced to a nominal 150 psig. There is a tee which supplies
372 a non-active branch downstream of the regulating station, which I'll designate as NG
373 Branch Pipe "F". NG Branch Pipe F heads in a southerly direction on GCW property,

374 crosses above Edwardsville Road for approximately 66 feet (0.01 miles), and reenters
375 GCW property south of Edwardsville Road. The GCW isolation valves on GCW
376 property are located on the north and south side of Edwardsville Road. NG Branch Pipe
377 F is normally turned off, but could be turned on to provide an alternative source of
378 natural gas to Cokemaking, Ironmaking, Utility Operations and ancillary buildings south
379 of Edwardsville Road normally supplied by NG Pipe A in the event of an interruption of
380 natural gas from MRT-1.

381 As noted above in discussing MRT-1, the NG Pipe A piping supplying
382 Cokemaking, Ironmaking, Utility Operations and ancillary buildings south of
383 Edwardsville Road is not interconnected with and could not provide natural gas to the
384 Steelmaking, Hot Rolling and ancillary buildings located south of Madison Avenue
385 between 15th and 20th Streets normally supplied by NG Pipe B and its branch pipes. NG
386 Branch Pipe F has never been opened or used to supply natural gas to Cokemaking,
387 Ironmaking, Utility Operations and ancillary buildings located south of Edwardsville
388 Road. This is the only public crossing NG Branch Pipe F makes, which crossing is
389 bordered by GCW property on both sides of Edwardsville Road.

390 **4. MRT-3 and MRT-4**

391 **Q. Please describe the GCW pipe connecting to the MRT-3 delivery point.**

392 A. MRT has only a valve connected to their piping at MRT-3. Pressure would be delivered
393 at 180 psig. As I previously testified, the MRT-3 delivery point is normally closed and is
394 only for use during situations where the gas normally received at MRT-1 is disrupted or
395 unavailable for some reason. MRT-3 is located on GCW property. For MRT-3 to be
396 turned on or activated requires both MRT and GCW to open their separate valves. GCW

397 owns and operates a single natural gas pipe connecting to MRT-3, which I'll designate as
398 NG Pipe "G", and is an above-ground pipe. This single natural gas pipe ends at another
399 normally closed GCW valve that is located downstream of MRT-3, all of which is
400 entirely on GCW property east of 21st Street and north of Edwardsville Road. Opening
401 this second normally closed valve and closing other valves all located on GCW property
402 can create a cross connection allowing the natural gas to be pressure regulated, metered
403 and supplied to the tee described above in the NG Branch Pipe C and NG Branch Pipe D
404 descriptions. NG Pipe G does not enter into or cross any public roads or right of ways.

405 **Q. Please describe the GCW pipe connecting to the MRT-4 delivery point.**

406 A. MRT has one set of pressure regulators and related valves and piping at MRT-4.
407 Pressure would be delivered at 150 psig. As I previously testified, the MRT-4 delivery
408 point is only for use during situations where the gas normally received at MRT-1 is
409 disrupted or unavailable for some reason. MRT-4 is located within a GCW building on
410 private property west of 16th Street and north of Cleveland Blvd. For MRT-4 to be
411 turned on or activated requires both MRT and GCW to open their separate valves. From
412 GCW's building, a single customer owned underground pipe referred to by Staff as the
413 South Plant Line, and which I will refer to as NG Pipe "H", exits GCW's building in an
414 easterly direction onto private property and then turns south on public property for a total
415 of approximately 3,241 feet (0.61 miles) before it re-enters GCW property south of
416 Madison Avenue at 16th Street. More specifically, NG Pipe H traverses private property
417 in an easterly direction for approximately 844 feet (0.16 miles) after leaving GCW's
418 building until turning south and running parallel to or under 16th Street for approximately
419 2,397 feet (0.45 miles). NG Pipe H enters GCW's property on the south side of Madison

420 Avenue at 16th Street, and can supply natural gas to Hot Rolling, Finishing and ancillary
421 buildings. NG Pipe H is not active from the MRT-4 delivery point. However, GCW
422 maintains gas pressure in NG Pipe H at nominal 50 psig through a ¾-inch pipe
423 connection on GCW property located south of Madison Avenue. No gas flows through
424 the South Plant Line via this ¾-inch pipe connection to supply any operations,
425 equipment, or buildings. NG Pipe H is maintained in a pressurized state for safety and
426 operational benefits. Keeping NG Pipe H pressurized provides a natural gas source for
427 gas detection activity during patrols and leak surveys and minimizes the time required to
428 restore the line to active service in the event of a disruption of gas from MRT-1.

429 **Q. When was the last time GCW received natural gas at the MRT-3 and MRT-4**
430 **delivery points?**

431 A. The last time we used these delivery points was on the 20th and 21st of May, 2005, when
432 MRT-1 was closed due to maintenance work on GCW piping at Hot Rolling. The total
433 volume delivered through MRT-3 and MRT-4 was 290 mmBtu on May 20th and 66
434 mmBtu on May 21st.

435 **5. Piping in Public Areas**

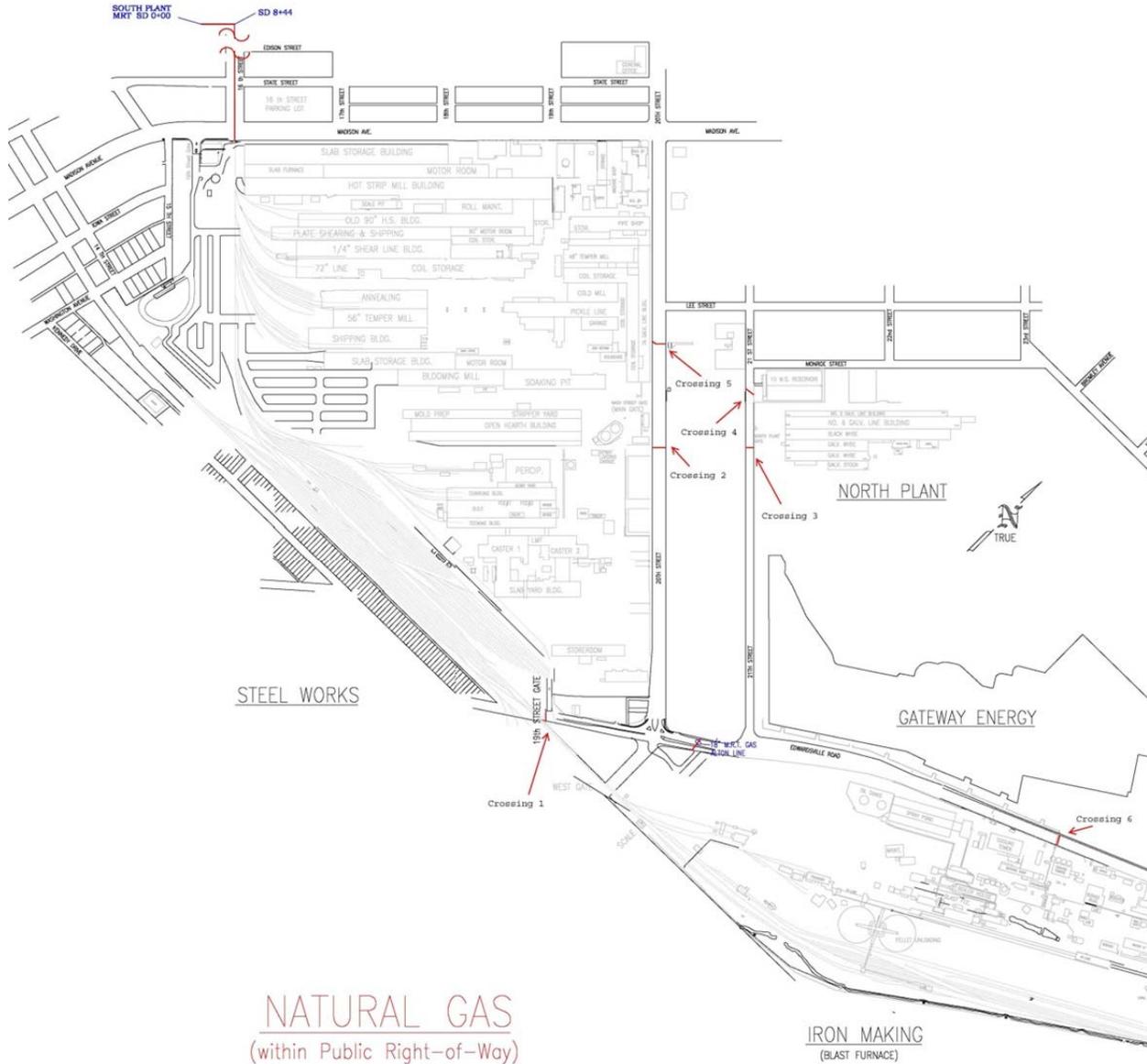
436 **Q. Are there any portions of GCW customer owned natural gas piping in public areas**
437 **that are greater than one mile in length?**

438 A. No. All portions of natural gas pipes located in public areas are less than one mile in
439 length. In fact, all but one of the portions located in a public area are less than 72 feet in
440 length. Excluding NG Pipe H or what Staff has called the South Plant Line, the GCW
441 natural gas piping makes six individual street crossings: two crossings on Edwardsville
442 Road -- one underground and one (normally closed) aboveground, two underground

443 crossings on 20th Street, and two underground crossings on 21st Street. The six individual
444 street crossings combined together add up to a total of approximately 380 feet in the
445 public area. The other portion (NG Pipe H or South Plant Line) has approximately 2,397
446 feet (0.45 miles) in a public area along 16th Street. While pressure is maintained in NG
447 Pipe H for safety and operational reasons, this pipe's connection to MRT-4 is normally
448 closed. The total length of natural gas pipe in public areas, including NG Pipe H and the
449 six individual street crossings, is a total of 2,777 feet. There are no valves located within
450 the public area.

451 A drawing depicting the approximate location of the natural gas piping described
452 above is attached to my testimony as USS Ex. 1.1P (Public) and USS Ex. 1.1C
453 (Confidential). USS Ex. 1.1P depicts the approximate location of the above-described
454 natural gas piping in public areas. USS Ex. 1.1C depicts the approximate location of the
455 above-described natural gas piping in public areas and on GCW property, and has been
456 designated as Confidential by U. S. Steel.

457 The following drawing depicts the approximate location of the above-described
458 natural gas piping in public areas.



459

460

6. GCW's Use of Natural Gas

461

Q. Describe the usage of natural gas by GCW.

462

A. Natural gas is transported on MRT pipelines and delivered to Granite City Works customer owned piping system. The natural gas consumed by Granite City Works is primarily used for process heating or fuel for the Blast Furnace operation. All natural gas is used solely by Granite City Works and no gas is resold.

465

466 **Q. How much natural gas does GCW generally consume in its operations?**

467 A. On average, GCW uses from 7.2 to 13.5 million MMBtus of natural gas per year. The
468 most energy intensive pieces of natural gas equipment at GCW are the two blast furnaces
469 (Ironmaking) and four 80" hot strip mill slab reheat furnaces (Hot Rolling).

470 **Q. How much natural gas is consumed in each of the process areas you described?**

471 A. Based upon 2010 data, Cokemaking and Ironmaking together consumed 56.4%,
472 Steelmaking 3.6%, Hot Rolling 34.0%, Finishing 1.6%, and Utility Operations 4.4%.

473 **Q. Please provide a breakdown of the portion of natural gas consumed at GCW that
474 crosses each street or road.**

475 A. Based upon 2010 data, 60.3% of the natural gas delivered to GCW does not cross a road
476 or street. This gas is consumed within (i) Cokemaking, Ironmaking, Utility Operations
477 and ancillary buildings located on south side of Edwardsville Road via the previously
478 described NG Pipe A connection to MRT-1 and (ii) Utility Operations and ancillary
479 buildings located on north side of Edwardsville Road east of 21st Street via the previously
480 described NG Pipe E connection to MRT-2. The balance of the natural gas delivered to
481 GCW, 39.7%, crosses Edwardsville Road via the previously described NG Pipe B
482 connection to MRT-1. But 34.6% of the total natural gas consumed by GCW
483 (approximately 87.2% of the 39.7%) does not cross any other road or street and is
484 consumed by Steelmaking, Hot Rolling and ancillary buildings south of Madison Avenue
485 between 15th Street and 20th Street. This accounts for 94.9% of the total natural gas
486 consumed by GCW (60.3% plus 34.6% = 94.9%).

487 The remaining 5.1% of the total natural gas consumed by GCW (100% minus
488 94.9% = 5.1%) crosses 20th Street and 21st Street via the above-described NG Branch

489 Pipe C. But 0.2% of the total natural gas consumed by GCW does not cross any other
490 road or street and is consumed by ancillary buildings east of 21st Street and North of
491 Edwardsville Road. This accounts for 95.1% of the total gas consumed by GCW (60.3%
492 plus 34.6% plus 0.2% = 95.1%). The remaining 4.9% of the total natural gas consumed
493 by GCW (100% minus 95.1% = 4.9%) crosses 21st Street and 20th Street via the
494 previously-described NG Branch Pipe D and is consumed by Steelmaking, Finishing, Hot
495 Rolling, and ancillary buildings located south of Madison Avenue between 15th Street
496 and 20th Street.

497 The above-described MRT-2 NG Branch Pipe F that crosses above Edwardsville
498 Road has never been opened, so no natural gas has ever crossed a street or road or been
499 consumed via this pipe. Similarly, since the above-described MRT-3 NG Pipe G and
500 MRT-4 NG Pipe H were kept closed in 2010, no natural gas was delivered, consumed, or
501 crossed any streets or roads via these pipes.

502 **D. Coke Oven Gas Piping**

503 **Q. Please describe the process that results in the by-product fuel known as coke oven**
504 **gas.**

505 A. GCW's Cokemaking process has 2 coke oven batteries, as noted above, used to produce
506 coke through the process of coal carbonization. Each battery contains 45 ovens. Each
507 oven is approximately 13 feet tall, by 18 inches wide, by 43 feet deep. Coal
508 carbonization generates a by-product volume of gas called coke oven gas that is treated
509 via by-product equipment to provide a clean fuel gas after removing condensable,
510 corrosive and other components. The by-product equipment includes tar and liquor
511 separation, primary gas cooling, compression in an exhauster, electrostatic tar droplet

512 removal, ammonia removal, secondary gas cooling, naphthalene removal, benzene
513 removal, and hydrogen sulphide removal as described in more detail in the
514 documentation provided by GCW that was attached to Mr. Burk's testimony as Staff Ex.
515 1.01, Appendix A, Attachment 12.

516 **Q. Please explain the general purpose and consumption of coke oven gas at Granite**
517 **City Works.**

518 A. GCW's coke oven gas is a by-product of the Cokemaking process. As a by-product fuel
519 gas, Granite City Works utilizes this fuel gas source in place of natural gas. Coke oven
520 gas has roughly half the Btu heating value as natural gas. Coke oven gas is supplied at
521 low pressure (nominal 20 psig) via GCW owned fuel lines to various production
522 operations at GCW and is referred to as the coke oven gas piping ("COG"). All coke
523 oven gas generated is consumed solely by Granite City Works and no coke oven gas is
524 sold.

525 As noted above, GCW is a unified operation. As part of a unified integrated steel
526 mill operation, there are portions of GCW that perform different steelmaking processes in
527 the production of steel. Such processes can generally be identified as Cokemaking,
528 Ironmaking, Utility Operations, Steelmaking, Hot Rolling, and Finishing. Coke oven gas
529 is distributed through customer owned fuel gas pipes to each of these processes.
530 Currently, coke oven gas is consumed within Cokemaking, Ironmaking, Utility
531 Operations and Hot Rolling. It could be used within Steelmaking and Finishing. All of
532 these processes are owned and operated by GCW. There are some portions of the COG
533 piping located in public areas adjacent to GCW's contiguous property that supply or can
534 supply Steelmaking, Finishing, and Hot Rolling processes. Each portion of the COG

535 piping located in public areas is adjacent to GCW's contiguous property and each portion
536 is less than one mile in length.

537 **Q. Is Coke Oven Gas the sole fuel source supplied by GCW customer owned fuel gas**
538 **pipes?**

539 A. No, as described to Staff during a June 2009 site visit, GCW uses a mixed fuel gas
540 (roughly 70/30 natural gas/air mixture) as an equivalent coke oven gas fuel source to
541 maintain pressure (nominal 15 psig) in the COG piping when there is not enough coke
542 oven gas available. GCW's mixing station is located on GCW property south of Madison
543 Avenue between 15th and 20th Streets. This mixed fuel gas source can be supplied to
544 Cokemaking, Ironmaking, Utility Operations, Steelmaking, Hot Rolling, and Finishing
545 via the same COG piping described above. At the time of Staff's visit, Granite City
546 Works was in an idled state and no coke oven gas was available. The mixed fuel gas was
547 utilized to maintain heat on the coke oven batteries.

548 **Q. What amount of COG is used at GCW without ever leaving GCW property and**
549 **entering the COG piping located in a public area?**

550 A. Based upon 2010 data, 95.37% of the coke oven gas consumed at GCW did not cross a
551 road or street or enter into any public area. This coke oven gas was consumed by
552 Cokemaking, Ironmaking and Utility Operations all located on GCW property south of
553 Edwardsville Road. The remaining 4.63% of coke oven gas entered COG piping with
554 some pipe portions located in public areas. This coke oven gas was consumed by Hot
555 Rolling located on contiguous GCW property south of Madison Avenue between 15th and
556 20th Streets.

557 **Q. Please describe the COG piping that is located in a public area.**

558 A. The GCW COG piping starts after compression at a COG distribution center located on
559 GCW property south of Edwardsville Road. One of the pipes connected to the
560 distribution center, which I will designate as COG Pipe “A”, runs underground in a
561 northerly direction and exits at the GCW property line directly into the right of way on
562 the south side of Edwardsville Road. Before reaching the south side road pavement,
563 COG Pipe A turns west inside the right of way and runs parallel to GCW property in the
564 right of way between the GCW fence and the south edge of the Edwardsville Road
565 pavement.

566 COG Pipe A is located in the right of way approximately halfway between the
567 south edge of Edwardsville Road pavement and GCW’s fence line, which is roughly 4 to
568 8 feet from GCW property line on Edwardsville Road depending on the varying width of
569 the Edwardsville Road right of way. COG Pipe A continues adjacent to the GCW
570 property line up to a point where COG Pipe A makes a northerly turn to cross under
571 Edwardsville Road and then continues north along the west side of 21st Street. Before
572 turning north and crossing under Edwardsville Road on the west side of 21st Street, this
573 portion of COG Pipe A traverses approximately 2,867 feet (0.54 miles).

574 After crossing under Edwardsville Road, COG Pipe A continues north in the west
575 side right of way of 21st Street up to a point where there is a connection to an unused
576 COG branch pipe, that I’ll designate as COG Branch Pipe “B”. GCW’s property borders
577 the east side of 21st Street the entire length and the majority of the west side of 21st Street
578 along this pipe portion. The pipe location in this portion is never more than 60 feet from
579 GCW property (width of 21st Street right of way) with the majority of COG Pipe A

580 piping being within 10 feet of GCW property bordering the west side of 21st Street. This
581 portion of the COG Pipe A traverses approximately 2,186 feet (0.41 miles) from the turn
582 under Edwardsville Road to COG Branch Pipe B.

583 The unused COG Branch Pipe B crosses under 21st Street in an easterly direction
584 for approximately 50 feet (0.01 miles), entering GCW property on the east side of 21st
585 Street. The isolation valve on COG Branch Pipe B is located on GCW property east of
586 21st Street and is kept closed. COG Branch Pipe B was previously used to supply a
587 Finishing operation that is no longer operating.

588 Just after the connection point for COG Branch Pipe B, COG Pipe A angles
589 northwest, re-enters GCW property west of 21st Street, turns again and runs west on
590 GCW property between 21st and 20th Streets. The total length of COG Pipe A from the
591 point it exits GCW property south of Edwardsville Road to the point it re-enters GCW
592 property west of 21st Street is approximately 5,053 feet (0.96 miles). COG Pipe A
593 traverses across GCW property up to the east side of 20th Street where COG Pipe A
594 crosses under 20th Street for approximately 69 feet (0.01 miles), and re-enters GCW
595 property west of 20th Street. COG Pipe A ends on GCW property west of 20th Street
596 where COG Pipe A can supply coke oven or mixed fuel gas to be consumed by
597 Steelmaking. Currently, no coke oven or mixed fuel gas is being consumed in
598 Steelmaking. The isolation valve for COG Pipe A is located on GCW property west of
599 20th Street.

600 COG Pipe A ends on GCW property west of 20th Street, but before it ends it
601 supplies a new underground pipe that I will designate as COG Pipe "C". COG Pipe C
602 starts on GCW property west of 20th Street before it exits GCW property and enters the

603 public right of way on the west side of 20th Street. COG Pipe C turns north inside the
604 right of way and parallels the GCW property line along 20th Street, staying within the
605 west side right of way of 20th Street up to a point where there is another branch point
606 connection that I'll designate as COG Branch Pipe "D". The COG Pipe C location in this
607 portion is in the right of way under a sidewalk that borders GCW property and the west
608 curb edge of 20th Street. COG Pipe C is never more than 6 feet (the width of the
609 sidewalk) off the GCW property line. This COG Pipe C portion of piping is
610 approximately 367 feet (0.07 miles) from the GCW property exit point to COG Branch
611 Pipe D.

612 COG Branch Pipe D can supply coke oven or mixed fuel gas to a Finishing
613 operation, but is not being used because this operation is currently idled. COG Branch
614 Pipe D runs for approximately 4 feet (0.00 miles) before entering GCW property. The
615 isolation valve on COG Branch Pipe D is located inside GCW property west of 20th
616 Street. Although this branch is inactive for coke oven gas or mixed fuel gas supply, it is
617 the source pipe to provide nitrogen gas for purging.

618 From COG Branch Pipe D, COG Pipe C continues north along 20th Street
619 paralleling 20th Street and the GCW property line until it turns west at the corner of 20th
620 Street and Madison Avenue and parallels the GCW property line and Madison Avenue up
621 to another branch point that I will designate as COG Branch Pipe "E". Again, the
622 location of COG Pipe C as it progresses up 20th Street is inside the right of way of the
623 west side of 20th Street under the sidewalk that borders GCW property and the west curb
624 edge of 20th Street. COG Pipe C is never more than 6 feet (the width of the sidewalk) off

625 the GCW property line. This remaining 20th Street portion of the COG Pipe C traverses
626 approximately 1125 feet (0.21 miles).

627 The location of COG Pipe C as it progresses west down the south side of Madison
628 Avenue from 20th Street is inside the south side right of way of Madison Avenue under
629 the sidewalk that borders GCW property to roughly 3 feet south of the south curb edge of
630 Madison Avenue. This portion of COG Pipe C is never more than 8 feet off the GCW
631 property line as it progresses west along Madison Avenue. This portion of COG Pipe C
632 is approximately 618 feet (0.12 miles) from the turn at Madison Avenue to the
633 connection point for COG Branch Pipe E. The total length of COG Pipe C from the point
634 COG Pipe C exits GCW property along 20th Street to the point COG Branch Pipe E
635 enters GCW property south of Madison Avenue is approximately 2,110 feet (0.40 miles).

636 COG Branch Pipe E piping ends on GCW property south of Madison Avenue
637 where COG Branch Pipe E can supply coke oven or mixed fuel gas to be consumed by
638 Steelmaking. Currently, no coke oven or mixed fuel gas is being consumed in
639 Steelmaking. COG Branch Pipe E runs south for approximately 8 feet (0.00 miles)
640 before entering GCW property south of Madison Avenue. The isolation valve for COG
641 Branch Pipe E is located on GCW property south of Madison Avenue. Although COG
642 Branch Pipe E is inactive for coke oven or mixed fuel gas supply to Steelmaking, COG
643 Branch Pipe E is used as the source pipe to provide mixed fuel gas for maintaining
644 pressure in the COG piping when there is not enough coke oven gas available.

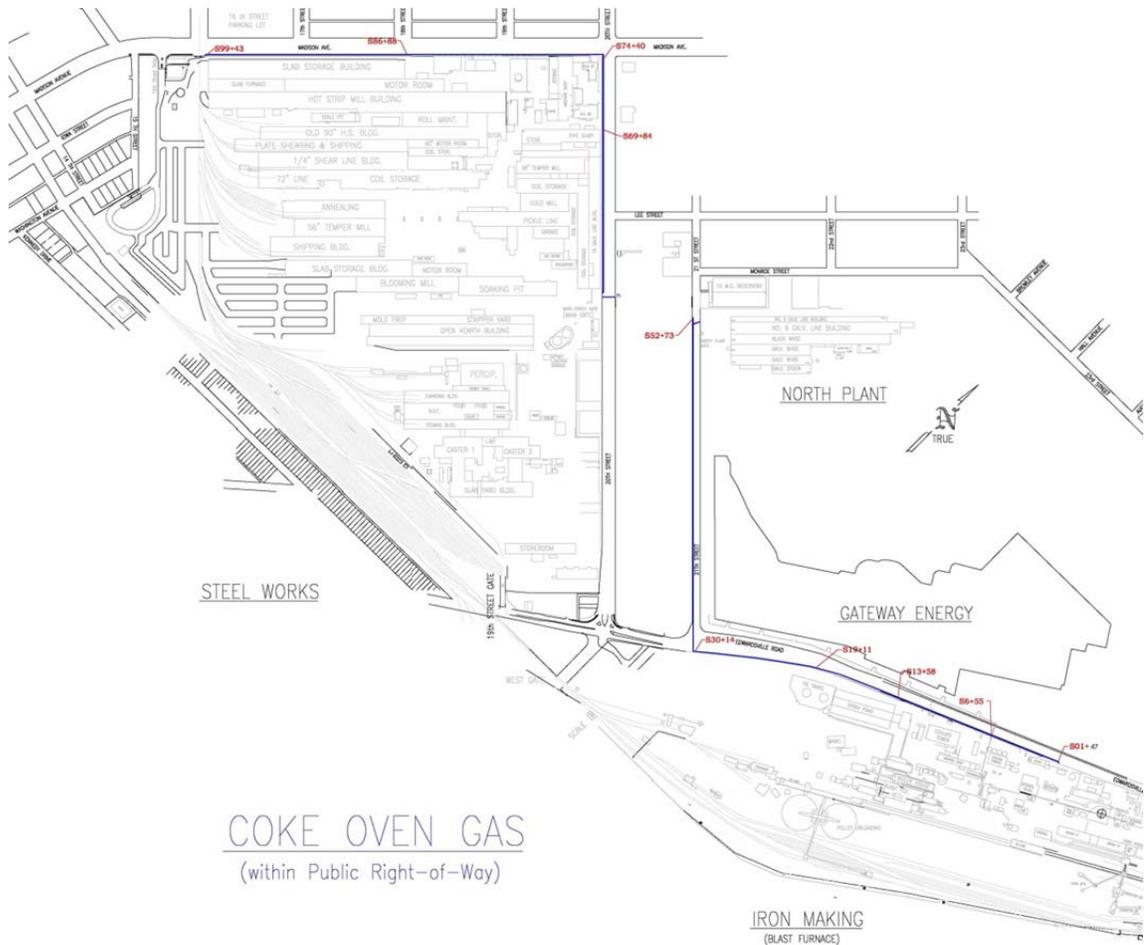
645 Effectively, COG Pipe C ends at COG Branch Pipe E. At this point, either coke
646 oven gas, mixed fuel gas, or a combination of both enters a new pipe portion that I'll
647 designate COG Pipe "F". COG Pipe F becomes the single source pipe to the Hot Rolling

648 process. COG Pipe F travels west and parallels Madison Avenue and the GCW property
649 line up to a point where COG Pipe F turns south and enters GCW property to supply gas
650 (coke oven gas, or mixed fuel gas) to Hot Rolling. The location of COG Pipe F as it
651 progresses west down the south side of Madison Avenue from COG Branch Pipe E is
652 inside the south side right of way of Madison Avenue under the sidewalk that borders
653 GCW property to roughly 3 feet south of the south curb edge of Madison Avenue. COG
654 Pipe F is never more than 8 feet off the GCW property line as it progresses west along
655 Madison Avenue. The total length of COG Pipe F from its beginning to the point it
656 enters GCW property south of Madison Avenue near 16th Street is approximately 1,877
657 feet (0.36 miles).

658 **Q. Are there any portions of GCW owned COG piping in public areas that are greater**
659 **than one mile in length?**

660 A. GCW has several distinct and different portions of COG piping, each with different
661 branches for delivering coke oven gas or mixed fuel gas. Each portion of COG pipe
662 located in the public domain is less than one mile in length. There are also no valves
663 located within the public right of way and there is no above ground COG piping located
664 within a public area. A drawing depicting the approximate location of the COG piping
665 described above is attached to my testimony as USS Ex. 1.2P (Public) and USS Ex. 1.2C
666 (Confidential). USS Ex. 1.2P depicts the approximate location of the above-described
667 COG piping in public areas. USS Ex. 1.2C depicts the approximate location of the
668 above-described COG piping in public areas and on GCW property, and has been
669 designated as Confidential by U. S. Steel.

670 The following drawing depicts the approximate location of the above-described
671 COG piping in public areas.



672
673 **III. RESPONSE TO STAFF**
674 **A. Regulatory and Enforcement Provisions**
675 **Q. Do you have any response to Staff witness Mr. Burk’s testimony regarding**
676 **regulatory and enforcement provisions?³**

³ ICC Staff Ex. 1.0, 2:43-3:62.

677 A. I am not a lawyer and do not intend by my testimony to offer any legal opinions.
678 However, I do have two observations based on my understanding of applicable laws and
679 regulations. First, I would note that the Commission has not adopted any independent
680 pipeline safety regulations, but has instead adopted certain specific federal pipeline safety
681 regulations. Specifically, pursuant to Section 590.10 of the Commission's Rules, the
682 Commission adopted "the standards contained in 49 CFR 191.23, 192, 193 and 199 as of
683 January 1, 2009, as its minimum safety standards for the transportation of gas and for gas
684 pipeline facilities."⁴ While U. S. Steel will address legal issues in its briefs, it is my
685 understanding that this makes the appropriate interpretation of the federal regulations by
686 federal authorities highly relevant to resolving the jurisdictional issues in this case. It
687 would be inappropriate to impose requirements or standards that differ from the Federal
688 Rules the Commission has adopted. Second, Mr. Burk's testimony states that "the
689 federal standards codified under 49 CFR Sections 191, 192, 193, and 199 have been
690 adopted by the State of Illinois pursuant to 83 Ill. Adm. Code 590."⁵ Mr. Burk's
691 testimony inaccurately indicates that all of Part 191 of the Federal Rules was adopted by
692 the Commission, when only Section 191.23 was adopted as of the date of issuing his
693 testimony.⁶

⁴ 83 Ill. Admin. Code 590.10.

⁵ ICC Staff Ex. 1.0, 3:61-2.

⁶ On August 2, 2011, the Commission entered an order in Docket No. 11-0121 adopting amendments to Part 590 to be effective August 15, 2011. The amendments to Part 590 adopt the standards contained in 49 CFR 191.1, 191.3, 191.5, 191.7, 191.9, 191.11, 191.13, 191.15, 191.17, 191.23, 191.25, 192, 193 and 199 as of January 1, 2011, as the minimum safety standards for the transportation of gas and for gas pipeline facilities.

694 **B. Reported Coke Oven Gas Releases**

695 **Q. Staff witness Mr. Burk testified that he received e-mail notifications on April 9, 2008**
696 **and May 5, 2008 from an engineer at the Central Region Office of the United States**
697 **Department of Transportation, Pipeline and Hazardous Materials Safety**
698 **Administration ("PHMSA") reporting the release of coke oven gas at GCW.⁷ How**
699 **did PHMSA become aware of these releases?**

700 A. PHMSA became aware of these releases because GCW self-reported these releases to the
701 National Response Center in compliance with applicable environmental law and
702 regulations.⁸ Coke oven gas contains certain hazardous substances that are not typically
703 present in natural gas. The environmental laws require us to report a release of hazardous
704 substances to the environment if the amount of any chemical in the coke oven gas
705 released exceeds the threshold amount, called the "reportable quantity" or "RQ". The
706 RQ is specified in the environmental regulations. If the RQ is exceeded for any
707 chemical, we report it to the National Response Center ("NRC"), the Illinois Emergency
708 Management Agency, and local emergency responders.

709 **Q. How does GCW determine whether a given release is reportable?**

710 A. We work with the plant's Environmental Quality Control ("EQC") Department, who
711 makes the final determination whether the release is reportable. We provide them with
712 the approximate size of the hole, the approximate pressure in the line and the estimated
713 time the gas may have been leaking. Based upon the chemical composition of the coke

⁷ ICC Staff Ex. 1.0, 4:63-7.

⁸ Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §11021; 40 CFR § 302.4.

714 oven gas, and the above information, EQC determines the potential amount of the release
715 to the environment of each chemical in the gas. They use conservative assumptions to
716 determine whether any particular release must be reported.

717 **Q. How much coke oven gas must be released for the release to be reportable?**

718 A. As I mentioned above, releases must be reported when a chemical in the gas is released
719 over the RQ. The need to report a release of coke oven gas is driven by the fact that there
720 is benzene in coke oven gas and the reportable quantity for benzene is extremely low at
721 10 pounds (8,944 scf of coke oven gas). As a result, even small coke oven gas releases of
722 modest duration may need to be reported under the environmental regulations. While any
723 release of combustible gas is a serious matter that must be evaluated and addressed
724 appropriately, the reporting of a coke oven gas release should not be interpreted to
725 necessarily indicate that there was a significant or dangerous release of combustible gas,
726 or otherwise indicate the presence of a combustible gas safety issue.

727 **Q. Does GCW account for the fact that a pipeline release occurs underground, that is,
728 in soil?**

729 A. As I stated before, GCW uses conservative assumptions in favor of reporting. GCW
730 makes no adjustments to its calculation when the pipe releasing the gas is buried
731 underground. This means that the actual amount of gas released may be less than the
732 calculated amount used to determine if the applicable RQ was exceeded because the soil
733 surrounding the pipe may impede the actual release of gas. In addition, GCW assumes
734 the leak is 100 percent coke oven gas and does not adjust its calculations to account for
735 the fact that the released gas may be a mixture of coke oven gas and mixed fuel gas –
736 which does not contain benzene -- in calculating a reportable quantity.

737 **Q. How do you know if a release occurred?**

738 A. As I described earlier in my testimony, we hire contractors to perform leak surveys on
739 our pipelines. They immediately inform us if the presence of gas is detected. GCW
740 employees may also detect the presence of gas and report it to us.

741 **Q. How does an employee know if coke oven gas is present?**

742 A. They can detect it by smell. Coke oven gas has a very strong and distinctive odor due to
743 the numerous chemicals in the gas. It has a very pungent odor similar to a very strong
744 moth ball smell.

745 **Q. What does your department do when the presence of coke oven gas is discovered?**

746 A. We investigate to determine the location and source of the gas. After the location of the
747 release is identified and confirmed, the pipe is isolated and a nitrogen purge is started.
748 The area around the detected gas release is excavated to allow visual inspection of the
749 pipe and identification of the source of the escaping gas. Once the source of the gas is
750 identified, repairs are performed as appropriate.

751 **Q. Were the coke oven gas releases referenced in Staff's testimony reported under the**
752 **Illinois Pipeline Safety Act, PHMSA regulations, or any other laws that specifically**
753 **apply to gas pipelines?**

754 A. No.

755 **Q. Why not?**

756 A. Because the COG pipes are not subject to Illinois Pipeline Safety Act or PHMSA's
757 jurisdiction. Also, the releases were not reportable "incidents," "accidents" or "safety-
758 related conditions" under state or federal pipeline safety laws. Further, none of the

759 releases resulted in a death or personal injury necessitating in-patient hospitalization or
760 involved estimated property damage, including cost of gas lost, of \$50,000 or more.

761 **Q. Please describe the coke oven gas release reported on April 7, 2008 as referenced in**
762 **Staff's testimony.⁹**

763 A. This is referred to as Incident Report #867243. A potential coke oven gas release was
764 detected at 0900. The potential release was investigated and confirmed at 1100. The
765 presence of gas was detected by a GCW employee and was located in the first portion of
766 COG Pipe A described above, approximately 300 feet after the pipe exits GCW property
767 and turns west in the right of way on Edwardsville Road. This piping is located
768 approximately 5 feet from GCW's property line. The leak was isolated at 1210. The
769 piping was purged with nitrogen introduced through the above-described COG Branch
770 Pipe D and excavated to begin repairs. When the piping was exposed, the hole was too
771 small to be visually located. A forty foot section of the piping was replaced. The
772 calculated amount of coke oven gas released was approximately 2,538 scfh, or a total of
773 8,037 scf or 4 mmBtu.

774 **Q. Please describe the coke oven gas release reported on 05/04/08 as referenced in**
775 **Staff's testimony.¹⁰**

776 A. This is referred to as incident Report #869878. A potential coke oven gas release was
777 detected at 1826. The potential release was investigated and confirmed at 1930. The
778 presence of gas was reported by a GCW Security employee. The presence of gas was

⁹ ICC Staff Ex. 1.0, 4:63-7.

¹⁰ *Id.*

779 located in piping on Granite City Works' property located between 21st and 20th Streets.
780 The line was isolated at 1951 and purged with nitrogen introduced through the described
781 COG Branch Pipe D. When the piping was exposed, the hole was approximately ½-inch
782 in diameter. A two foot section of the piping was replaced. The calculated amount of
783 coke oven gas released was approximately 9,220 scfh, or a total of 12,908 scf or 7
784 mmBtu.

785 **C. Coke Oven Gas System**

786 **Q. Do you have any comments or response to Staff witness Mr. Burk's description of**
787 **the "coke oven gas system"?¹¹**

788 A. Yes, I do. It is not disputed that "several thousand linear feet" of the COG piping is
789 located adjacent to GCW property under public rights of way.¹² However, Mr. Burk's
790 description of the COG piping is incomplete and inaccurate.

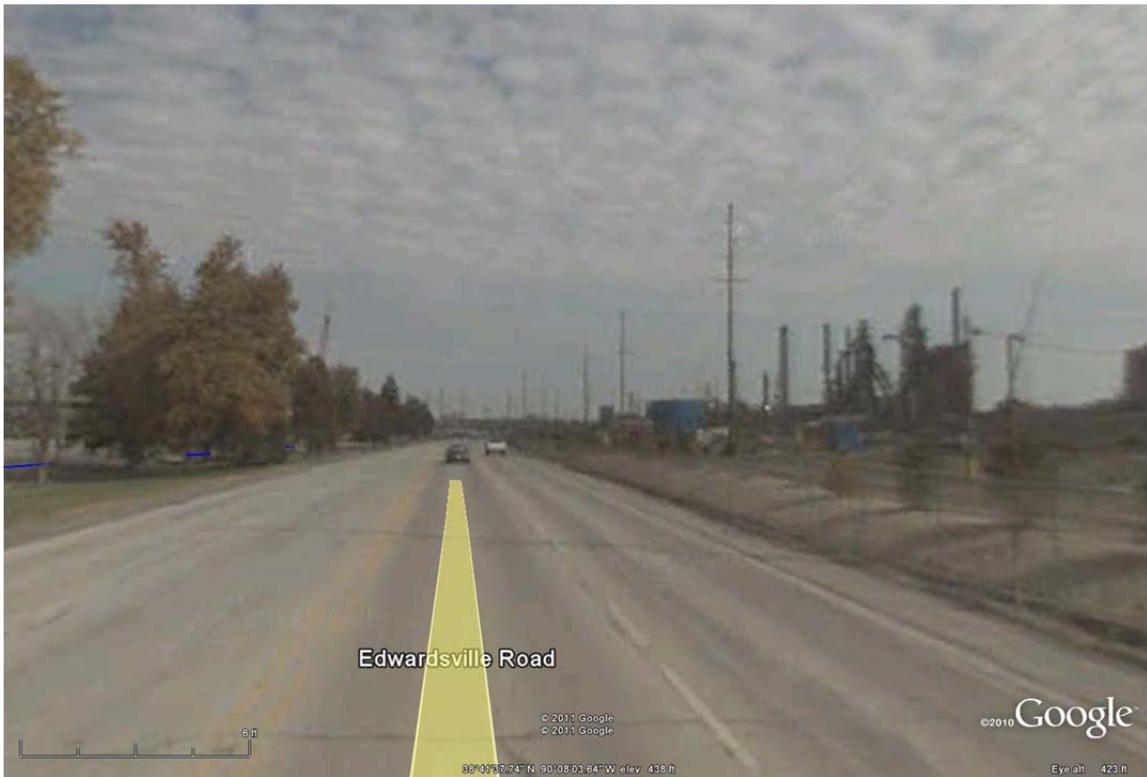
791 First, as I explained earlier, GCW is a unified integrated steel mill located on
792 contiguous property. Several streets happen to cut across GCW, but there are no sections
793 of GCW that are separated by more than one street. While portions of the COG piping
794 are located under the right of way of some of these streets, these rights of way are in a
795 heavy industrial area with minimal residential foot traffic – a fact not conveyed by Mr.
796 Burk's description. The area along Edwardsville Road where COG Pipe A is located
797 does not contain a sidewalk, is not conducive to foot traffic, and is bordered by GCW
798 property on both sides of the road as illustrated by the following photos (COG Pipe A
799 located between road and fence line on right side of photos):

¹¹ ICC Staff Ex. 1.0, 4:75-5:92.

¹² *Id.* at 5:86-8.



800



801

802 The area along 21st Street where COG Pipe A is located is bordered by GCW on
803 both sides of the street for the majority of the length. While there is a single family
804 residence on 21st Street, this area in general is highly industrial. The road running across
805 the satellite image below (left to right) is 21st Street where COG Pipe A is located in the
806 right of way between GCW property and the street pavement edge:



807
808 The sidewalks referred to by Mr. Burk along 20th Street and Madison Avenue
809 (COG Pipe C and COG Pipe F described-above) are directly adjacent to GCW
810 property/buildings along 20th Street and Madison Avenue (COG piping located on left
811 side of photos adjacent to GCW buildings and fence line):



812



813

814 As I previously stated, GCW Security monitors activity within and around GCW
815 24 hours a day and the public portions of the COG piping that are pictured above are also
816 Leak Surveyed with instruments on a weekly basis.

817 Second, Mr. Burk's description of what he calls the COG piping system seems to
818 imply that virtually all coke oven gas burned at GCW is transported via a pipe to the hot
819 strip mill. As I explained above, the exact opposite is true. The vast majority of the coke
820 oven gas is consumed on GCW property without ever crossing a GCW property line or
821 entering a public way. Less than 5% of the total coke oven gas consumed in 2010
822 entered GCW customer owned fuel gas piping located in a public area. More than 95%
823 of the coke oven gas consumed in 2010 never left GCW property located south of
824 Edwardsville Road. Similarly, Mr. Burk's testimony does not mention that the COG
825 piping located in public rights of way comes from a COG distribution center on GCW
826 property and that a low operating pressure of nominal 20 psig is used.

827 Third, Mr. Burk's description of the COG piping appears to imply that there is a
828 single constructed pipeline that extends well over a mile from one steel plant to another
829 steel plant. Again, GCW is a unified integrated steel mill located on contiguous property.
830 As part of a unified integrated steel mill operation, there are portions of GCW that
831 perform different steelmaking processes in the production of steel. Such processes can
832 generally be identified as Cokemaking, Ironmaking, Utility Operations, Steelmaking, Hot
833 Rolling, and Finishing. Coke oven gas is not transported between separate steel plants.
834 Also, as I have described in this testimony, there is no single constructed pipeline as Mr.
835 Burk's description implies, but rather several distinct and different COG pipes and COG

836 branch pipes are used and all portions of the piping located in the public domain are
837 adjacent to GCW property and less than one mile in length.

838 **D. Natural Gas System**

839 **Q. Do you have any comments or response to Staff witness Mr. Burk's description of**
840 **the "natural gas system"?¹³**

841 A. Yes. Mr. Burk's description of the natural gas piping at GCW is inaccurate and
842 incomplete. Mr. Burk stated "[t]he USS GCW receives natural gas at four taps."¹⁴ GCW
843 does have four natural gas delivery points from MRT. GCW does not actively receive
844 gas from these four MRT delivery points as suggested by Mr. Burk. As previously
845 explained, the valves on the piping for MRT-3 and MRT-4 are normally closed, MRT
846 and GCW would both have to open their valves for gas to be delivered from MRT-3 or
847 MRT-4, and neither MRT-3 nor MRT-4 have been used since 2005.

848 With respect to MRT-1, MRT-2, and MRT-3, Mr. Burk states "Each of these
849 three taps is located on property owned by USS GCW. These taps supply interconnected
850 systems of pipelines. The systems of pipelines, the Natural Gas Pipelines, are partly on
851 USS GCW property and partly not on USS GCW property. The portions of the Natural
852 Gas Pipelines that are not on USS GCW property are under public rights of way and
853 streets at various locations. The Natural Gas Pipelines transport natural gas to several
854 locations within the GCW facility, where it is used in the steelmaking process."¹⁵ Some
855 of the GCW natural gas piping is interconnected, but it is not all interconnected. As

¹³ ICC Staff Ex. 1.0, 5:93-6:110.

¹⁴ *Id.* at 5:96.

¹⁵ *Id.* at 5:97-104.

856 discussed earlier in my testimony, the two GCW pipes connecting to MRT-1 (NG Pipe A
857 and NG Pipe B) are not interconnected to each other. As a result, while there is piping
858 providing a normally closed connection between MRT-2 and MRT-1 via NG Branch Pipe
859 F (MRT-2) and NG Pipe A (MRT-1), gas from MRT-2 (the second active connection)
860 cannot under any circumstance reach the GCW piping (NG Pipe B - MRT-1) serving the
861 area of GCW south of Madison Avenue between 15th Street and 20th Street.

862 In his letter to PHMSA dated October 14, 2009, Mr. Burk describes his request
863 for an interpretation letter as involving a situation “in which the interstate pipeline tap,
864 along with any metering and pressure regulation, is located inside the property line of the
865 factory, but the system piping leaves the factory property and enters governmental
866 property (that is a public street or highway) six times before finally entering the portion
867 of the property on which the natural gas is consumed.”¹⁶ The situation described by Mr.
868 Burk is not the situation at GCW. As previously explained, most of the natural gas at
869 GCW is consumed without ever crossing a public road or area, and the only delivery
870 point receiving any amount of natural gas that actually travels across a public road or area
871 is through MRT-1 (NG Pipe B).

872 The NG Pipe B connection to MRT-1 initially crosses Edwardsville Road and
873 eventually enters branch piping to cross 20th Street and 21st Street two times each. Less
874 than 40% of the total gas consumed by GCW crosses Edwardsville Road, and less than
875 5.2% of the total gas consumed by GCW crosses 20th Street or 21st Street. The gas
876 received at MRT-2 never leaves GCW property or crosses any street because the valves
877 for NG Branch Pipe F (MRT-2) that crosses above Edwardsville Road and connects to

¹⁶ Staff Ex. 1.01, Attachment A, p. 2.

878 NG Pipe A (MRT-1) is always closed and has never been used. Similarly, the gas
879 received through the NG Pipe A connection to MRT-1 that serves the Cokemaking,
880 Ironmaking and Utility Operations south of Edwardsville Road never crosses or enters
881 into a public area. As previously explained, the MRT and GCW valves at MRT-4
882 connecting to the South Plant Line are normally closed. The total length of the natural
883 gas piping with active connections from MRT delivery points crossing public streets or
884 roads is only 314 feet.

885 Mr. Burk also states “[t]he fourth tap is off of a separate MRT/CenterPoint
886 transmission line and that tap location is not on USS GCW property. This fourth tap
887 provides natural gas to a pipeline, (‘South Plant Line’) that supplies the ‘South Plant’
888 portion of the facility.”¹⁷ The MRT-4 delivery point is located inside a GCW building
889 located on private property as described above. Further, Mr. Burk’s description implies
890 that GCW has a separate “South Plant” and that natural gas is actively supplied to this
891 plant through the MRT-4 delivery point. Neither of those implications is correct. As I
892 previously explained, GCW is a unified integrated steel mill operation and the MRT and
893 GCW valves for the MRT-4 delivery point are normally closed and have not been opened
894 since 2005.

895 **E. Applicability of Title 49 Requirements**

896 **Q. Mr. Burk testified it is his “position that the facilities operated by USS GCW**
897 **described above as not located on USS GCW property are subject to the Title 49**

¹⁷ ICC Staff Ex. 1.0, at 5:104-7.

898 **requirement.”¹⁸ Did Mr. Burk identify the portions of the coke oven gas and**
899 **natural gas piping that he asserts are subject to the Commission’s jurisdiction?**

900 A. No. Mr. Burk has not clearly identified in testimony the portions of the coke oven gas
901 and natural gas piping over which Staff asserts the Commission has jurisdiction. Prior to
902 the initiation of this docket Staff issued correspondence to U. S. Steel asserting extensive
903 jurisdiction over piping and “facilities” located on U. S. Steel property.¹⁹ It appeared that
904 Staff was only asserting jurisdiction over the piping located in public areas given Mr.
905 Burk’s testimonial reference to facilities not located on USS property.”²⁰ U. S. Steel
906 sought clarification and issued a data request to Staff asking if it was “Mr. Burk’s position
907 that USS operations and facilities located on USS GCW plant property are subject to
908 Title 49 and the Illinois Gas Pipeline Safety Act?”²¹ U. S. Steel also requested that Mr.
909 Burk “identify which operations and/or facilities” on GCW property are asserted to be
910 subject to ICC jurisdiction (if he took that position), and provide the basis for [such]
911 position.”²² Mr. Burk responded that his position was that operations and facilities on
912 GCW property are subject to the Commission’s jurisdiction.²³ However, his response did
913 not identify the specific operations or facilities. Hence, U. S. Steel is not on clear notice
914 of the facilities over which Staff asserts jurisdiction. The response did state that the basis
915 for Mr. Burk’s position was that “individual pipeline facilities cannot, for safety and

¹⁸ *Id.* at 6:111-14.

¹⁹ Staff Ex. 1.01, App. A, Attachment 3, p. 1 and Attachment 4, p. 2.

²⁰ Staff Ex. 1.0, 6:111-14.

²¹ U. S. Steel Data Request USS-Staff 1.14.

²² *Id.*

²³ Staff Response to Data Request USS-Staff 1.14.

916 maintenance purposes, be separated into discrete jurisdictional and non-jurisdictional
917 sections.”²⁴

918 **Q. Do you have a response to Mr. Burk’s position that customer owned piping located**
919 **on a customer’s premises cannot be distinguished for jurisdictional purposes from**
920 **customer owned piping not located on a customer’s premises?**

921 A. Yes. It is my understanding that the pipeline safety laws and regulations only apply to
922 the transportation of gas. Mr. Burk’s assertion that the location of customer owned
923 piping is not relevant fails to take into account whether facilities are involved in the
924 transportation of gas. Instead, he has simply identified facilities that he believes the laws
925 and regulations should apply to without consideration of whether the laws and regulations
926 permit such regulation. While the PHMSA letter to Staff was based on incorrect facts as
927 discussed below, even that letter recognized that “piping operated by the facility operator
928 entirely on the grounds of the facility is considered ‘in-plant piping’ and would not be
929 subject to the pipeline safety regulations”²⁵

930 **Q. Do you have any other comments on Staff’s position described above?**

931 A. Yes. In response to U. S. Steel Data Request USS-Staff 1.08, Staff produced a March 9,
932 2009, letter from Mr. Burk as the Manager of the Pipeline Safety Program to Mr. Keith
933 Erickson at the University of Illinois (“U of I”). A copy of this letter and related
934 correspondence produced by Staff is attached to my testimony as USS Ex. 1.3. In the
935 March 9, 2009 letter Mr. Burk advised the U of I as follows:

²⁴ *Id.*

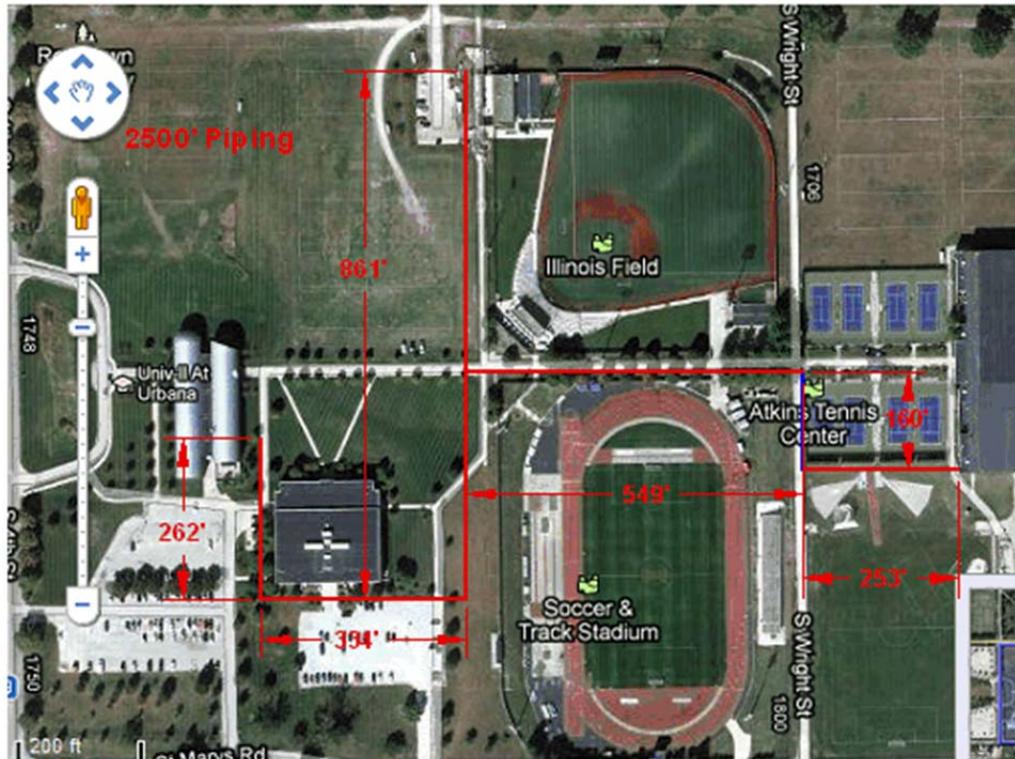
²⁵ Staff Ex. 1.01, App. B, p. 1.

936 I have determined that the natural gas piping beyond the meter set
937 assembly would be considered non-jurisdictional to the pipeline safety
938 regulations. My conclusions regarding jurisdiction are based on the
939 assumption that all of the natural gas delivered to the structures is being
940 used by the University of Illinois for its own purposes.

941 First, contrary to his position with U. S. Steel, Mr. Burk did not assert jurisdiction
942 over the U of I lines notwithstanding that those lines are located in a public place. The
943 term “public place” is not defined in Part 192. However, PHMSA Interpretation Letter
944 #PI-90-029, referring to §192.11(a) regarding petroleum gas systems, does define this
945 term.

946 The term “public place” in Section 192.11(a) means a place which is
947 generally open to all persons in a community as opposed to being
948 restricted to specific persons. We consider churches, schools, and
949 commercial building as well as any highway, road or property which is
950 frequented by all persons to be public places under Section 192.11(a).

951 The University of Illinois is a school, and fits clearly within this definition of a “public
952 place.” Mr. Burk’s letter determined that thousands of feet of gas piping in a “public
953 place” was non-jurisdictional. The satellite image below reasonably illustrates the
954 approximate location of the natural gas piping for one of the six non-jurisdictional areas
955 referenced in the letter. This area has approximately 2,500 feet of piping located within a
956 public place.



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The March 9, 2009 letter also made distinctions between jurisdictional and non-jurisdictional sections for six facilities at the University of Illinois. Four determinations were that the natural gas piping conveying gas supplied by Ameren Illinois through jurisdictional distribution lines “beyond the meter set would be considered non-jurisdictional.” Two determinations were that the natural gas piping conveying gas supplied by University of Illinois jurisdictional lines “beyond the meter set would be considered non-jurisdictional.” Mr. Burk’s claim that jurisdictional distinctions cannot be made for U. S. Steel is inconsistent with the jurisdictional distinctions made by Mr. Burk with respect to the U of I facilities. Given that the location of the U of I facilities is a public university in the vicinity of several sports facilities where thousands of persons may be gathered, any safety concerns would appear to be heightened in the U of I

969 context. In contrast, the U. S. Steel fuel lines at issue are located in a highly industrial
970 area with minimal foot traffic.

971 I would also note that during the February 2009 meeting with ICC Staff, U. S.
972 Steel representatives requested examples of companies currently subject to the Illinois
973 Gas Pipeline Safety Act and Mr. Burk responded that GCW would be similar to the
974 University of Illinois.

975 GCW meets the same criteria that Mr. Burk applied to determine the U of I
976 facilities were non-jurisdictional. The GCW natural gas piping in question is all on the
977 customer side of the metering equipment and connections with MRT, and all gas is
978 consumed by GCW and not sold to any third party. The GCW COG piping in question is
979 all located downstream of a GCW distribution center and all coke oven gas is consumed
980 by GCW and not sold to any third party. The fact that the U of I piping was in a public
981 place did not prevent Mr. Burk from making a non-jurisdictional finding for U of I, and
982 should not prevent a non-jurisdictional finding for GCW.

983 **F. PHMSA Interpretation Letter**

984 **Q. Mr. Burk's testimony discusses his written request for an interpretation letter from**
985 **the Department of Transportation's Pipeline and Hazardous Materials Safety**
986 **Administration ("PHMSA") regarding the application of PHMSA's regulations at**
987 **49 CFR 192 (Part 192) to GCW's natural gas and coke oven gas piping.²⁶ Do you**
988 **have any comments on the description of GCW and its facilities provided to**
989 **PHMSA?**

²⁶ Staff Ex. 1.0, 7:129-8:175.

990 A. Yes. There were significant factual inaccuracies and omissions in the communications
991 with PHMSA. PHMSA's August 11, 2010 interpretation letter indicates that PHMSA
992 was asked to provide an interpretation of the pipeline safety regulations with respect to
993 certain pipelines "in the vicinity of [U. S. Steel's] Granite City Works ... steelmaking
994 complex ..." which Mr. Burk stated "consists of a number of facilities separated by one
995 State highway and several public streets"²⁷ GCW is not a number of separate
996 facilities. Rather, as I previously explained, Granite City Works production operation is
997 one unified integrated steel mill located on contiguous property, with each tract of land
998 separated by no more than a road or street. It appears that PHMSA was provided
999 inaccurate information that lead to the misunderstanding that Granite City Works is a
1000 grouping of multiple facilities separated by one highway and multiple streets.

1001 The PHMSA interpretation letter also describes the coke oven gas system as
1002 follows: "coke oven gas is produced in one GCW facility and transported to another
1003 GCW facility for processing and burning."²⁸ GCW is a single facility. It appears
1004 PHMSA has a misconception that GCW has a separate coke oven gas production facility
1005 and that GCW's COG piping moves coke oven gas from this facility to another facility
1006 where it is processed and burned. As described above, the Cokemaking process provides
1007 a clean by-product fuel supplied to the compression station located on GCW property
1008 south of Edwardsville Road. All portions of the GCW COG piping start after
1009 compression at the COG distribution center located on GCW property south of
1010 Edwardsville Road. Coke oven gas is not transported to another GCW facility for

²⁷ Staff Ex. 1.1, Appendix ("App.") B, p. 1.

²⁸ *Id.*, p. 2.

1011 processing and burning. All coke oven gas is consumed by GCW production operations
1012 as described above, and no coke oven gas is sold.

1013 Also, as discussed above in Section III.D of my testimony, Mr. Burk incorrectly
1014 describes the GCW natural gas piping in his letter to PHMSA dated October 14, 2009 as
1015 leaving GCW property “and enter[ing] governmental property (that is a public street or
1016 highway) six times before finally entering the portion of the property on which the
1017 natural gas is consumed.”

1018 **Q. Were there other communications between PHMSA and Staff regarding GCW**
1019 **besides Mr. Burk’s April 14, 2009 letter and PHMSA’s August 11, 2010 response?**²⁹

1020 A. Yes. In Staff’s Responses to U. S. Steel Data Requests USS-Staff 1.11 and 1.13 the
1021 original notification e-mails from PHMSA to Staff referred to in Mr. Burk’s testimony
1022 and other communications between PHMSA and Staff were produced. These
1023 communications are attached to my testimony as USS Ex. 1.4.

1024 **Q. Did Granite City Works have the opportunity to provide information to PHMSA in**
1025 **connection with Staff’s request?**

1026 A. No. Granite City Works did seek to participate in the interaction and dialogue with
1027 PHMSA through a communication with the ICC Staff. Granite City Works was denied
1028 this request. As indicated in Staff’s response attached to my testimony as USS Ex. 1.5,
1029 Staff advised GCW that no statute or rule “would require or permit USS participation in
1030 our statutorily mandated cooperation with the US Department of Transportation.”

²⁹ Staff Ex. 1.01, App. A and App. B.

1031 **Q. Do you have any comments on Mr. Burk's description of PHMSA's interpretation**
1032 **letter with respect to the natural gas piping?**³⁰

1033 A. Yes. Mr. Burk's testimony quotes a portion of the PHMSA letter regarding the
1034 applicability of the pipeline safety laws and regulations to the natural gas piping, but he
1035 does not discuss or analyze PHMSA's interpretation relative to Staff's position in this
1036 docket. PHMSA stated that "piping operated by the [destination] facility operator
1037 entirely on the grounds of the facility is considered 'in-plant piping' and would not be
1038 subject to the pipeline safety regulations although it may be subject to State building
1039 codes or other regulations."³¹ As noted above, Mr. Burk's position is that the pipeline
1040 safety laws and regulations apply to such in-plant piping. Mr. Burk never discusses or
1041 explains his departure from PHMSA's position regarding in-plant piping.

1042 With respect to off-plant natural gas piping, and putting aside PHMSA's factual
1043 misunderstandings, the PHMSA letter stated that "PHMSA has elected not to apply the
1044 Federal gas pipeline safety regulations to such lines if they are associated with the plant,
1045 meaning they are operated by plant personnel, run between plant buildings and are less
1046 than one mile in length."³² PHMSA further stated, "[w]ith respect to the question of
1047 whether such a line is a transmission line or distribution line, PHMSA has not taken a
1048 position on that since we currently do not regulate such lines as stated above."³³ Again,
1049 Mr. Burk's testimony never discusses or explains why he takes a different position and

³⁰ Staff Ex. 1.0, 7:140-8:169.

³¹ *Id.*, p. 1.

³² *Id.*, p. 2.

³³ *Id.*

1050 seeks to apply gas pipeline safety regulations to the off-plant natural gas piping meeting
1051 the criteria specified in the PHMSA letter.

1052 PHMSA did state that it “would not object to a State regulating the portions of
1053 such lines that are not on plant property if the State determined there was a need.”³⁴ Mr.
1054 Burk’s testimony does not address or establish any need to regulate such off-plant lines.
1055 PHMSA also stated that “[i]f a State decided to begin regulating such lines, one possible
1056 approach the State could take would be to provide advance notice to operators of such
1057 lines that it would treat a line operated below 20% SMYS as a distribution line and a line
1058 operated above 20% SMYS as a transmission line, provide an opportunity for comment
1059 as appropriate under State procedures, and publish a final policy.”³⁵ Again, Mr. Burk’s
1060 testimony does not address PHMSA’s indication that a State should publish its own rules
1061 after “provid[ing] an opportunity for comment as appropriate under State
1062 procedures”³⁶

1063 **Q. Do you have any comments on Mr. Burk’s description of PHMSA’s interpretation**
1064 **letter with respect to the coke oven gas piping?**³⁷

1065 A. Yes. As discussed above, Mr. Burk’s description of the GCW customer owned COG fuel
1066 lines is inaccurate. “[C]oke oven gas is [not] produced in one GCW facility and
1067 transported to another GCW facility”³⁸ Rather, GCW is one facility on contiguous
1068 property on which the public portions of the COG piping originate and end. Also, as I

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.*, 8:170-75.

³⁸ *Id.*

1069 have testified, the COG piping is similar to the natural gas piping in that each portion of
1070 the COG piping located in the public domain is less than one mile in length. By applying
1071 the same reasoning PHMSA utilized with the natural gas piping, PHMSA would not
1072 regulate the COG piping “if they are associated with the plant, meaning they are operated
1073 by plant personnel, run between plant buildings and are less than one mile in length.”
1074 The COG piping in the public areas meets this standard.

1075 Mr. Burk also stated that PHMSA did not offer an opinion regarding the
1076 classification of the COG line as a transmission line or a distribution line.³⁹ While
1077 PHMSA did not reach a specific conclusion, Mr. Burk does not mention that the PHMSA
1078 letter states “[w]ith respect to classifying such a [COG] line as a transmission or a
1079 distribution line, you could take a similar approach as the one suggested above [for the
1080 natural gas lines].”⁴⁰

1081 **Q. To your knowledge has the Illinois Commerce Commission defined what constitutes**
1082 **a single customer in any context?**

1083 A. Yes. There are several utilities within the State that have a definition of “premises” in
1084 their Commission-approved tariffs and define customer as a person legally receiving
1085 service at a premises. The definition from Ameren Illinois Company’s gas tariff is:

1086 Premises means a contiguous tract of land separated by nothing more than
1087 a highway, street, alley or railroad right-of-way, where all buildings and/or
1088 gas consuming devices located thereon are owned or occupied by a single
1089 Customer or applicant for gas service, or where all gas delivered thereto is

³⁹ Staff Ex. 1.0, 8:174-5.

⁴⁰ Staff Ex. 1.01, App. B, p. 2.

1090 utilized to supply one or more buildings and/or gas loads which the
1091 Company considers as components of a unified operation.⁴¹

1092 **Q. Is Granite City Works a unified operation?**

1093 A. Yes. The Granite City Works production operation is a unified operation with each tract
1094 of land separated by no more than a highway or street and all gas consuming devices are
1095 owned by Granite City Works.

1096 **G. Classification as Distribution or Transmission Lines**

1097 **Q. Did Mr. Burk address whether the natural gas pipes should be considered**
1098 **“distribution” or “transmission” pipelines?**

1099 A. Yes. Mr. Burk describes how the Pipeline Safety Program has previously determined
1100 whether a pipeline serving a large volume customer and connected directly to an
1101 interstate transmission pipeline is a transmission line or a distribution line, and opines
1102 that each of the GCW natural gas lines connected to MRT would be considered a
1103 distribution line if it operated below 20% of specified maximum yield strength or
1104 “SMYS”.⁴² However, Mr. Burk testified that he could not say whether those lines would
1105 be considered transmission lines or distribution lines because he was not provided enough
1106 information to determine SMYS.⁴³ I would also note that this approach is supported in
1107 the PHMSA interpretation letter.⁴⁴

⁴¹ Ameren Illinois Company, Gas Service Schedule Ill. C. C. No. 2, Original Sheet No. 3.007.

⁴² Staff Ex. 1.0, 11:249-13:288.

⁴³ *Id.*, 12:276-13:298.

⁴⁴ Staff Ex. 1.01, App. B, p. 2.

1108 **Q. How do you respond to Mr. Burk's position on how the classification of the natural**
1109 **gas lines should be determined?**

1110 A. First, as I explained above, GCW's position is that the natural gas fuel lines are not
1111 jurisdictional. If those lines were to be considered jurisdictional, we appear to be in
1112 agreement as to how the determination of jurisdictional transmission line versus
1113 jurisdictional distribution line would be made. Whether the lines operate at or above
1114 20% SMYS or below 20% SMYS would be the operative factor applicable to these lines
1115 pursuant to 49 USC § 192.3.

1116 **Q. What is the highest SMYS at which any of the natural gas fuel lines described**
1117 **earlier in your testimony are operated?**

1118 A. For the natural gas pipelines the SMYS ranges from approximately 9% to 15%. All of
1119 these are well below the threshold of 20% SMYS. Thus, even if these lines are
1120 considered jurisdictional, which they are not, they would be "distribution" rather than
1121 "transmission" lines.

1122 **Q. Do you have any response to Mr. Burk statement that he was not provided enough**
1123 **information to determine the SMYS for the natural gas fuel lines?⁴⁵**

1124 A. Yes. Mr. Burk's statement is confusing and appears to be mistaken. Information was
1125 provided to Staff prior to this docket regarding the SMYS for the natural gas and coke
1126 oven gas lines. Mr. Burk's letter to PHMSA stated that "we have received no indication
1127 that any of pipeline operates at a hoop stress of 20% or more of specified minimum yield

⁴⁵ Staff Ex. 1.0, 13:278-98.

1128 strength.”⁴⁶ Additionally, information regarding SMYS for the lines was provided to
1129 Commission Staff in communications occurring prior to this docket and documented in
1130 Staff’s filings.⁴⁷ Finally, supporting information for the SMYS figures provided in my
1131 testimony is available as a workpaper supporting my testimony.

1132 **Q. Did Mr. Burk address whether the coke oven gas fuel lines should be considered**
1133 **“distribution” or “transmission” pipelines?**

1134 A. Yes. Mr. Burk stated that “based strictly on the Title 49 CFR § 192.3 definition of a
1135 transmission line,” “[p]ipelines supplied by ‘gathering lines’ lines that collect gas from
1136 production facilities such as gas wells or synthetic natural gas plants have been
1137 considered ‘transmission lines’ regardless of the operating pressure.”⁴⁸ Mr. Burk asserted
1138 that “[t]he Coke Oven Gas Pipeline would be considered a ‘Transmission line’ since it
1139 receives gas from a gathering line supplied by a production facility.”⁴⁹ Mr. Burk further
1140 stated that “[t]he coke oven gas process produces the gas which is processed and
1141 delivered via the gathering lines to the transmission line that transports the gas to the
1142 utilization equipment.”⁵⁰

1143 **Q. How to you respond to Mr. Burk’s assertion that the COG line would be a**
1144 **transmission line?**

⁴⁶ Staff Ex. 1.01, App. A, p. 3.

⁴⁷ *Id.*, App. A, Attachment 5.

⁴⁸ Staff Ex. 1.0, 12:271-75.

⁴⁹ *Id.*, 13:289-93

⁵⁰ *Id.*

1145 A. First, as I explained above, GCW's position is that the coke oven gas fuel lines are not
1146 jurisdictional. Even if these lines are considered jurisdictional, they would be
1147 "distribution", rather than "transmission" lines, consistent with PHMSA's interpretation
1148 letter. As noted above, Mr. Burk failed to mention in his testimony that the PHMSA
1149 interpretation letter suggested that the approach followed for the natural gas lines
1150 (whether over or under 20% SMYS) could be used for the coke oven gas lines.⁵¹ The
1151 COG lines operate in the range of approximately 4% to 6% of SMYS. Further, Mr.
1152 Burk's letter to PHMSA specifically discussed the issue of whether "gathering lines"
1153 were involved. PHMSA's suggestion that the over/under 20% SMYS approach could be
1154 used indicates they did not accept or support Mr. Burk's position on this issue.

1155 Mr. Burk's assertion that the coke oven gas line is a transmission line does not
1156 follow from the "transmission line" definition he relies on because the COG line does not
1157 "transport" gas to "a distribution center, storage facility or large volume customer that is
1158 not down-stream from a distribution center."⁵² The Hot Strip Mill to which Mr. Burk
1159 refers in his October 14, 2009 letter to PHMSA⁵³ is not a distribution center, but it is
1160 located downstream of the distribution center I previously described in my testimony.
1161 The Hot Strip Mill is not a "large volume customer" or even a "customer", it is part of
1162 GCW production operations. The COG piping does not move gas to a storage facility.
1163 Finally, Mr. Burk's interpretation is contrary to what one normally thinks of when they

⁵¹ Staff Ex. 1.01, App. B, p. 2.

⁵² 49 CFR § 192.3.

⁵³ Staff Ex. 1.01, App. A, p. 3.

1164 think of transmission lines: large pipelines operated at high pressure traveling over great
1165 distances.

1166 **H. Non-Jurisdictional Issues**

1167 **Q. In addition to asserting jurisdiction over GCW piping, Mr. Burk offers testimony**
1168 **addressing whether U. S. Steel GCW has complied with the Illinois Pipeline Safety**
1169 **Act and the regulations adopted thereunder.⁵⁴ Do you have any comments or**
1170 **response to Mr. Burk's testimony regarding GCW's compliance with the Illinois**
1171 **Pipeline Safety Act and the regulations adopted thereunder?**

1172 **A.** Yes. Mr. Burk's testimony in this regard is beyond the scope of issues to be addressed in
1173 the initial phase of this proceeding pursuant to the order regarding case management
1174 entered in this docket. In the order regarding case management, the Administrative Law
1175 Judge adopted the agreement of Staff and U. S. Steel that the initial phase of this case
1176 would be limited solely to determination of jurisdictional issues and that compliance
1177 issues will be addressed after the initial phase:

1178 As an initial matter, the parties and Staff agree and stipulate that
1179 this matter presents certain threshold jurisdictional issues; the
1180 jurisdictional issues presented in the Commission's Initiating Order are
1181 more fully described in numbered items (1)-(3) on page 6 of the Initiating
1182 Order. USS is not stipulating that the Commission has jurisdiction over
1183 any of USS's facilities, contests and objects to the assertion of jurisdiction
1184 by the Commission as noted above, and has reserved its right to raise any
1185 and all legal and factual issues and arguments in opposition to the
1186 assertion of jurisdiction.

⁵⁴ Staff Ex. 1.0, 8:176-11:248.

1187 The parties and Staff further agree and stipulate that administrative
1188 economy dictates that the jurisdictional issues should properly be
1189 addressed and resolved prior to resolution of compliance questions.⁵⁵

1190 Consistent with the order on case management, I will not be addressing compliance issue
1191 in this phase of the proceeding. This is not intended as agreement or concurrence with
1192 this aspect of Mr. Burk's testimony, and U. S. Steel expressly reserves its right to address
1193 such compliance issues and contest Mr. Burk's assertions if this proceeding advances to
1194 address compliance issues.

1195 **IV. CONCLUSION**

1196 **Q. Does this complete your direct testimony?**

1197 **A. Yes.**

⁵⁵ Administrative Law Judge's Order Regarding Case Management Plan and Schedule, p. 3 (January 21, 2011); First Revised Administrative Law Judge's Order Regarding Case Management Plan and Schedule, p. 3 (June 17, 2011).