Exhibit No.:

Issue: CCN Application

Witness: Michael P. Kalis

Sponsoring Party: Platte County Regional

Sewer District

Type of Exhibit: Direct/Rebuttal Testimony

Date Testimony February 9, 2010

Case No.: SA-2010-0063

Prepared

PLATTE COUNTY REGIONAL SEWER DISTRICT

DIRECT / REBUTTAL TESTIMONY

OF

MICHAEL P. KALIS

CASE NO. SA-2010-0063

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of Timber Creek Sewer Company for a Certificate of Convenience and Necessity Certificate of Convenience and Necessity	
AFFIDAVIT OF MICHAEL P. KALIS	
STATE OF KANSAS)) ss COUNTY OF JOHNSON)	
MICHAEL P. KALIS, of lawful age, on his oath states: That he has review attached written testimony in question and answer form consisting of 6 patestimony and attached Schedules, all to be presented in the above case, that the ain the attached written testimony were given by him; that he has knowledge matters set forth in such answers; that such matters are true to the best of his knowlinformation and belief, and that the attached Schedules were prepared by him or his supervision or direction. Michael P. Kalis	nges of inswers of the wledge,
Subscribed and sworn to before me this 4th day of February, 2010.	
SUSAN BERNE otary Public - State of Kansas My Appt. Expires 4/11/2011 Notary Public	
CDATI	

My Commission expires: 4/11/201

1 2 3 4		DIRECT / REBUTTAL TESTIMONY OF <u>MICHAEL P. KALIS</u>
5 6	Q.	Please state your name and business address.
7	A.	My name is Michael P. Kalis. My business address is 8340 Mission Road Suite
8		240, Prairie Village, Kansas 66206.
9	Q.	What is your occupation?
10	A.	I have been a civil engineer for over 29 years. I am employed with HDR Inc.
11		("HDR Archer") as a professional engineer licensed in both Kansas and Missouri,
12		among other states.
13	Q.	What is your educational background?
14	A.	I graduated from the University of Kansas in 1980 with a Bachelor of Science
15		Degree in Civil Engineering.
16	Q.	As a professional engineer, do you have a particular focus of attention in civil
17		engineering?
18	A.	Yes. I primarily am involved in the design and construction of water and waste
19		water facilities.
20	Q.	Please describe your experience in designing and constructing waste water
21		treatment facilities.
22	A.	I have designed, or overseen the design, of over 30 waste water treatment
23		facilities in the State of Missouri.
24	Q.	On whose behalf are you testifying in this proceeding?
25	A.	I am testifying on behalf of the Platte County Regional Sewer District, which I
26		may refer to as the "Sewer District" or "District" in portions of my testimony.

1	Q.	What is your business relationship with the Sewer District?
2	A.	I was the project manager for the facility planning, design, and construction of the
3		District's primary wastewater treatment facility, the Brush Creek Treatment
4		Facility, built in 1997, and the treatment facility expansion, built in 2008. The
5		initial project also included the design and construction of interceptor sewers, 4
6		pump stations, and forcemains as part of a regionalization effort. We have served
7		the District in an advisory role since the beginning of our business relationship,
8		and since 1994, we have provided plan review services to the District. We have
9		also provided planning services with the Preliminary Engineering Report for the
10		Brush Creek Watershed Interceptor Sewer in 2005 and, most recently, the 2009
11		Master Plan Update.
12	Q.	So you are familiar with the Sewer Master Plan for the Platte County
13		Regional Sewer District prepared in 1995 by Burns & McDonnell
14		Engineering Company, as well as the 2009 Master Plan Update which was
15		recently adopted and approved by the District Board of Trustees, is that
16		correct?
17	A.	Yes. I have reviewed the 1995 Burns & McDonnell document, and was the
18		principal-in-charge of the 2009 Master Plan Update project. The document was
19		prepared under my supervision and control, and I wrote portions of the document.
20		The Executive Summary and specific portions of the Updated Plan are attached
21		hereto as Schedule MPK-1.
22	Q.	Have you had an opportunity to review the Application filed in this matter
23		and the prefiled direct testimony of Mr. Derek Sherry?

1	A.	Yes. I have reviewed both the Application and Mr. Sherry's direct testimony
2		along with the attached Schedules.
3	Q.	Could you briefly summarize the key components of the Master Plan Update
4		("Updated Plan") as it relates to the application at issue in this proceeding?
5	A.	Yes. The Updated Plan outlined a process by which land use and density
6		information was obtained from cooperative meetings with key entities, such as
7		city and county planning departments and area developers, and was used to
8		develop a land use map. From the land use map, the Updated Plan concluded that
9		future development in Platte County would likely include generally suburban type
10		development with moderate density around the metropolitan fringe, thus requiring
11		centralized sewer service. Several planning basins, or watersheds, were identified
12		as key basins for this type of future development. These facility planning basins
13		are further studied in the Updated Plan, providing population estimates, flow
14		projections, facility planning alternatives, facility sizing, capital cost estimates for
15		the alternatives, and an alternative analysis for each basin. The proposed area in
16		the subject application covers a large portion of Updated Plan's West Clear
17		Branch Facility Planning Basin. The Updated Plan provides the framework for
18		planning for and providing facilities in that area.
19	Q.	What would be the Sewer District's approach to providing service to the
20.		proposed service area?
21 ^	A.	As discussed in Mr. Reineke's testimony, the District is uniquely situated to serve
22		the proposed service area and such area is located within the existing corporation
23		boundaries of the Sewer District. The Sewer District has cooperative agreements

with the City of Platte City and the City of Kansas City which would allow the Sewer District to transport sewage to either of those entities for treatment. This is a far more economical process than that proposed by Timber Creek when taking into account future growth in the service area, as it would provide for sewage collection and treatment without the need to construct additional treatment facilities as soon, if at all. Timber Creek indicated in their Data Request Responses that their available capacity between their two treatment plants is only 343 to 398 connections; therefore, they would have to construct new or expand existing facilities for connections beyond that point. The District could take advantage of the significantly larger existing available capacity at the Platte City and Kansas City treatment facilities, which may or may not include any additional expansion of the treatment, depending on the build out of the area and of other adjacent areas tributary to those treatment facilities.

In regards to ultimate build-out of the area, the Updated Plan shows that the planned development in this basin is predominately in the upper reaches. An all-gravity solution in which gravity interceptors were extended downstream to a common point would involve excessive lengths of gravity sewer through areas of expected low density development and through the Platte River floodplain where the sewer would be inaccessible during flood events. Therefore, the Updated Plan identified and studied two facility alternative scenarios for the West Clear Branch Facility Planning Basin, involving multiple pump stations. In Scenario 1, flows gathered at various pump stations are conveyed in series to a pump station which then pumps to the Platte City Wastewater Treatment Plant for treatment by Platte

1 City. In Scenario 2, flows are gathered and conveyed in a similar manner to a 2 new treatment facility owned and operated by the District, discharging to the 3 Platte River. Since wastewater service is most efficient when planned on a 4 watershed basis, it is important to consider these facility alternatives for ultimate 5 build-out when determining service options as development occurs in an area. 6 The District's cooperative agreements allow these sewer entities to work together 7 when practical, efficient, and cost advantageous to provide the optimal service for 8 an area. 9 Q. At Page 7 and 8 of his direct testimony, Mr. Sherry describes Timber 10 Creek's approach to provide service to the proposed service area at issue. 11 Could you please address Timber Creek's plans as set forth in that 12 testimony? 13 Yes. The "Feasibility Study for Extended Service Area in Platte County", A. 14 Schedule DS-9, outlines a sewer plan that includes initial construction of pump 15 stations and two systems of forcemains to treatment at their two existing facilities, 16 until construction of a new treatment facility is necessary. The District's plan 17 would potentially pump to an existing treatment plant if the economic comparison 18 merits it, and would similarly include pump stations and forcemain, however it 19 could be to a single discharge point. This single discharge point could provide 20 both cost and environmental benefits. The District has an agreement with the City 21 of Platte City for cooperation in drainage areas common to both entities, including 22 the City providing adequate capacity at the Platte City/District boundary and 23 making their sewer system available to the District for connection. This would

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	include boundaries between Platte City and the District on the east side of
	Interstate 29, for conveyance to Platte City's wastewater treatment plant. This
	provides the opportunity for connections to an existing treatment facility far
	greater than that provided by Timber Creek's existing available capacity.
	Conversely, Data Request Responses provided by Timber Creek reveal that it has
	available capacity at its wastewater treatment plant on the east side of Interstate
	29 for only 43 to 68 equivalent dwelling units. The feasibility study shows a total
	of 129 estimated connections for years 2010 to 2012, so Timber Creek will have
	to provide the connection to their system on the west side of Interstate 29
	sometime in 2012 to utilize that portion of their available capacity. In total,
	Timber Creek has the capacity available for only 343 to 398 connections, which
	will not cover the ultimate number of connections estimated for the area by the
	Updated Plan.
Q.	Does this conclude your testimony at this time?
A.	Yes it does.

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