

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY-AMERICAN )  
WATER COMPANY FOR A CERTIFICATE OF )  
PUBLIC CONVENIENCE AND NECESSITY ) CASE NO. 2012-00096  
AUTHORIZING CONSTRUCTION OF THE )  
NORTHERN DIVISION CONNECTION )

ORDER

Kentucky-American Water Company ("Kentucky-American") has applied for a Certificate of Public Convenience and Necessity ("Certificate") to construct water transmission mains, a booster pump station, and two elevated water storage tanks. Finding that construction of the proposed facilities is necessary to ensure reliable service to Kentucky-American's Northern Division and will not result in the wasteful duplication of facilities, we grant the application.

STATEMENT OF THE CASE

Kentucky-American, a corporation organized and existing under the laws of Kentucky, owns and operates facilities used to distribute water to approximately 122,765 customers in Bourbon, Clark, Fayette, Gallatin, Grant, Harrison, Jessamine, Owen, Scott, and Woodford Counties.<sup>1</sup> It provides wholesale water service to Midway, Nicholasville, North Middletown, Georgetown, Versailles, East Clark County Water District, Jessamine-South Elkhorn Water District, Peaks Mill Water District, and Harrison

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<sup>1</sup> *Annual Report of Kentucky-American Water Company to the Kentucky Public Service Commission for the Year Ended December 31, 2011 (Water Operations)* at 5 and 30.

County Water Association.<sup>2</sup> It directly or indirectly provides potable water service to over 490,000 persons.<sup>3</sup>

Kentucky-American is divided into two divisions – Northern and Central. The Northern Division consists of its facilities and operations in Gallatin, Owen, and Grant Counties. All other facilities and operations are within the Central Division. The Central Division contains the overwhelming majority of Kentucky-American’s facilities and customers.<sup>4</sup>

Beginning in 2001, Kentucky-American embarked on several acquisitions that resulted in the creation of the Northern Division. It first acquired the assets of Tri-Village Water District (“Tri-Village”), a rural water district that served approximately 1,533 customers in Gallatin, Grant, and Owen counties.<sup>5</sup> Tri-Village lacked water production facilities and purchased its water requirements from the city of Owenton.<sup>6</sup>

Kentucky-American next acquired the water assets of Elk Lake Property Owners’ Association, Inc. (“Elk Lake”), a Kentucky non-profit corporation, that operated water treatment and distribution facilities that served approximately 310 customers in Owen

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<sup>2</sup> *Id.* at 33.

<sup>3</sup> See <http://www.amwater.com/kyaw/about-us/> (last visited Feb. 13, 2013).

<sup>4</sup> *Annual Report of Kentucky-American Water Company to the Kentucky Public Service Commission for the Year Ended December 31, 2012 (Water Operations)* at 4.

<sup>5</sup> *Annual Report of Tri-Village Water District to the Kentucky Public Service Commission for the Year Ended December 31, 2000* at 5 and 29. See also Case No. 2001-094, *The Verified Joint Application of Tri-Village Water District and Kentucky-American Water Company for the Approval of the Transfer of Ownership of the Assets of Tri-Village Water District to Kentucky-American Water Company* (Ky. PSC June 8, 2001) (approving Kentucky-American’s acquisition).

<sup>6</sup> *Id.* at 31.

County, Kentucky.<sup>7</sup> Elk Lake operated an isolated water treatment and distribution system that was unconnected to any neighboring water system.<sup>8</sup>

In September 2005, Kentucky-American acquired the facilities of the city of Owenton ("Owenton"). Owenton, a city of the fifth class, operated water treatment and distribution facilities that served approximately 1,100 retail customers and provided wholesale water service to the Tri-Village water system.<sup>9</sup> At the time of the acquisition, Kentucky-American was familiar with Owenton's operations, having provided technical assistance to Owenton on plant operations<sup>10</sup> and performed due diligence studies.<sup>11</sup>

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<sup>7</sup> *Annual Report of Elk Lake Property Owners Association, Inc. to the Kentucky Public Service Commission for the Year Ended December 31, 2001* at 24. Case No. 2002-00094, *The Verified Joint Application of Elk Lake Property Owners' Association, Inc. and Kentucky-American Water Company for the Approval of the Transfer of Ownership of the Assets of Elk Lake Property Owners' Association, Inc. Devoted to the Provision of Water Service to Kentucky-American Water Company* (Ky. PSC May 22, 2002) (approving Kentucky-American's acquisition).

<sup>8</sup> Elk Lake's water treatment facilities are no longer in use. Its water distribution system is now connected to the Northern Division's distribution system and can receive water from the Owenton Water Treatment Plant. Because of the hydraulics of the Northern Division's distribution system, Kentucky-American currently purchases water from Georgetown Municipal Water and Sewer Service to provide water service to the area that Elk Lake previously served.

<sup>9</sup> Kentucky-American's Response to Commission Staff's First Request for Information, Item 2 at 6. Kentucky-American also acquired Owenton's wastewater collection and treatment system as part of the transaction.

<sup>10</sup> V.R. 10/16/2012, 14:51:10 – 14:51:34.

<sup>11</sup> *Id.*, Item 2 at 2-62; Item 4 at 2-15. At the time of its purchase of the Owenton system, Kentucky-American was aware of several system deficiencies, including the single treatment process train and the need to relocate the raw water intake, and anticipated making \$1.5 million in capital expenditures over five years to correct these deficiencies.

Because Owenton is a city and statutorily exempt from Commission jurisdiction,<sup>12</sup> the Commission did not review the merits of Kentucky-American's acquisition of Owenton.<sup>13</sup>

The Northern Division currently serves 3,882 customers.<sup>14</sup> Its primary source for treated water is the Owenton Water Treatment Plant ("Owenton WTP").<sup>15</sup> Constructed in 1995 by Owenton, this plant has a design capacity of 1.44 million gallons of water per day ("MGD").<sup>16</sup> Since 2006, the plant has an average daily production of 830,000 gallons.<sup>17</sup> The primary source of supply for the Owenton WTP consists of an intake on Severn Creek, which is near the Kentucky River, and an impoundment that Owenton owns. The Northern Division also has interconnections with and purchases water from

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<sup>12</sup> KRS 278.010(3). See also *McClellan v. Louisville Water Co.*, 351 S.W.2d. 197 (Ky. 1961).

<sup>13</sup> Case No. 2005-00206, *The Verified Joint Application of the City of Owenton and Kentucky-American Water Company for Approval of the Transfer of Ownership of Water and Wastewater-Related Assets of the City of Owenton to Kentucky-American Water Company* (Ky. PSC July 22, 2005). For discussion regarding the Commission's authority to review a utility's acquisition of municipal utility facilities, see generally Case No. 2004-00157, *Notice of Ohio County Water District Acquiring Rockport Water System* (Ky. PSC July 12, 2004); Case No. 2000-00357, *The Application of Northern Kentucky Water District for Authorization to Acquire the Waterworks Distribution System of the City of Ludlow* (Ky. PSC July 20, 2000).

<sup>14</sup> Kentucky-American's Response to Attorney General's ("AG") Supplemental Request for Information, Item 44.

<sup>15</sup> During the calendar year ending December 31, 2011, the Northern Division produced and purchased 382,441,860 gallons of water. The sources of this water were:

Owenton Water Plant	337,370,416
Gallatin County Water District	10,185,000
Carroll County Water District No. 1	21,092,444
Georgetown Municipal Water and Sewer Service	13,794,000
Total:	382,441,860

Kentucky-American's Response to Commission Staff's First Request for Information, Items 15 and 28.

<sup>16</sup> Kentucky-American Water Co., "Engineering Feasibility Study Report for Supplying Kentucky American Water's North District Distribution System" ("Engineering Feasibility Study") (May 2012) at 1.

<sup>17</sup> *Id.* Kentucky-American has reported an increasing average daily production to the Kentucky Division of Water. On September 29, 2011, it reported the water treatment plant's average daily production as 929,800 gallons. Kentucky-American's Response to Commission Staff's First Request for Information, Item 18 at 147. The water treatment plant's maximum day production is 1,175,910 gallons, which occurred on July 23, 2011. Kentucky-American's Response to Commission Staff's First Request for Information, Item 6.

Carroll County Water District No. 1, Gallatin County Water District, and Georgetown Municipal Water and Sewer Service.<sup>18</sup> The Northern Division is not physically connected to the Central Division or its three water treatment plants.

The Owenton WTP currently suffers from several problems. Of greatest significance is the plant's lack of redundancy. As shown in Figure 1, which depicts the plant's operating process, the plant operates with a single treatment process train that uses clarifier or claricone in transferring raw water through the sedimentation process.<sup>19</sup> All raw water must go through the claricone. Due to the lack of a second claricone, if this claricone fails or needs repair or maintenance, the entire treatment process halts and the Owenton WTP's production of finished water ceases.<sup>20</sup> The Northern Division must then rely upon its water storage facilities. Given existing water storage capacity, if the claricone is out of service for more than a few hours, a significant portion of the Northern Division will be unserved.<sup>21</sup>

The Owenton WTP also lacks an adequate number of filters. Filters reduce the turbidity of the water. The Owenton WTP has two filters. Both must be in operation for the plant to meet normal demand. As with the claricone, if one filter is out of service for backwash or is otherwise in need of maintenance, the Owenton WTP cannot meet its normal demand and must rely upon its limited water storage facilities. Moreover,

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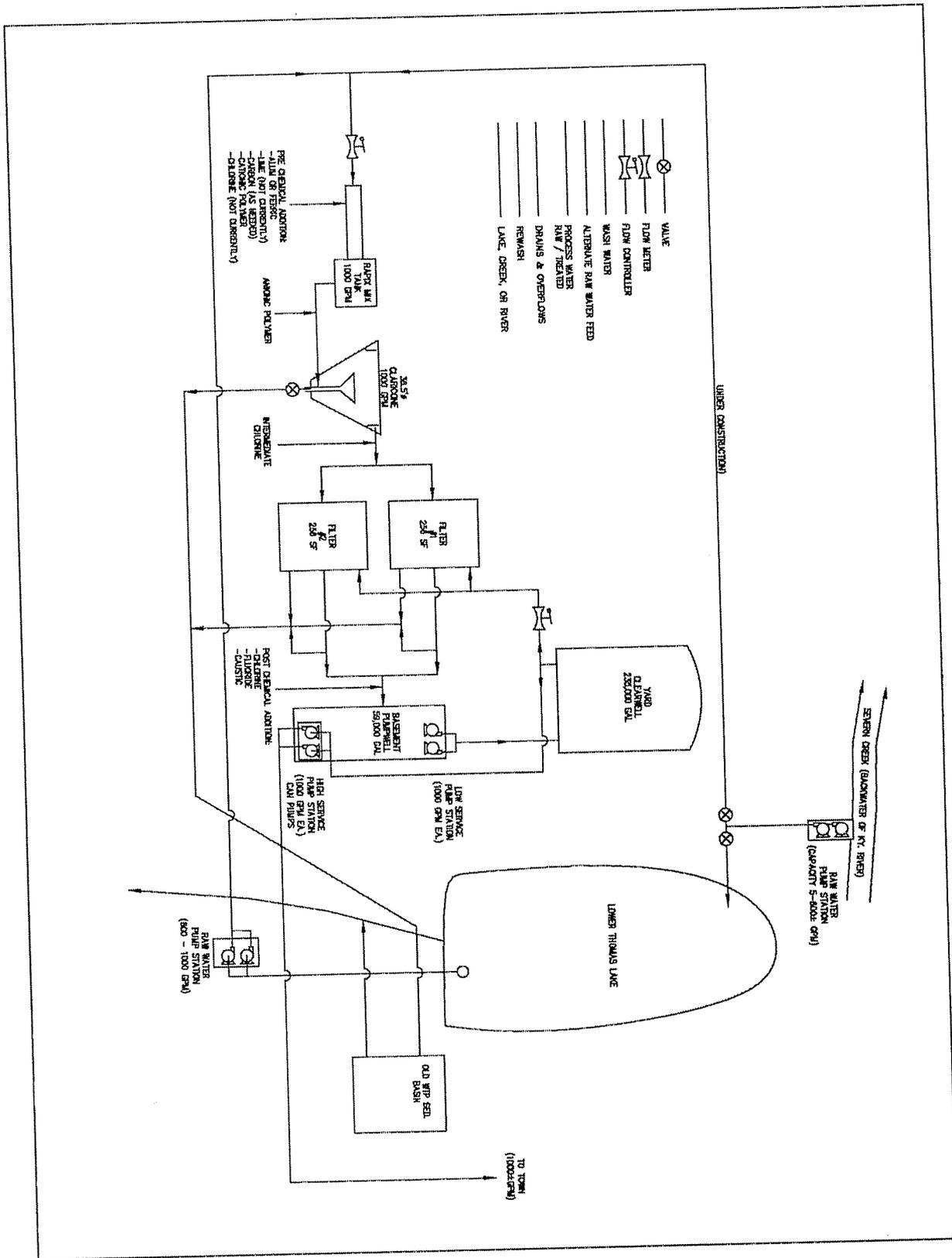
<sup>18</sup> *Supra* note 14. Kentucky-American's Response to AG's First Request for Information, Item 11. As of May 12, 2012, Kentucky-American was unable hydraulically to serve 643 customers on the Northern Division's distribution system from the Owenton Water Treatment Plant. *Id.* Item 29. *See also* *Id.* Item 33a (stating that 683 customers receive purchased water).

<sup>19</sup> Direct Testimony of Lance E. Williams at 3.

<sup>20</sup> The Kentucky Division of Water noted this problem in 2004. *See* Kentucky-American's Response to AG's First Request for Information, Item 9 at 2.

<sup>21</sup> Kentucky-American's Response to Commission Staff's First Request for Information, Item 33.

**FIGURE 1  
OWENTON WATER TREATMENT PLANT SCHEMATIC**



Source: Kentucky-American's Response to Commission Staff's First Request for Information, Item 77.

because the existing filters are not adequately sized, the available water detention time is reduced, the filters' ability to remove turbidity is lessened, and water quality suffers.<sup>22</sup>

Owenton WTP's chemical storage facilities are inadequately sized. The plant lacks containment facilities to store even small quantities of some chemicals. The limited facilities prevent the Northern Division from achieving cost savings by purchasing in bulk. It also poses some environmental hazards since chemicals must be frequently transported from off-site storage facilities.<sup>23</sup>

The Owenton WTP also has no provisions for residuals processing. Filter backwash and residuals from the claricone are piped to a settling basin, which is a remnant of a previous water treatment plant that Owenton owned and which is located on an adjacent property. The settling basin's walls are rapidly deteriorating. The site lacks any monitoring equipment to measure the amount of the settling that has occurred or the volume of the sludge in the basin. Kentucky-American's ability to remove sludge from the basin is very limited.<sup>24</sup>

The location of Owenton WTP's raw water intake limits the plant's ability to comply with new water quality regulations. The Owenton WTP's primary sources of supply are Severn Creek, which is near the Kentucky River, and an impoundment that Owenton owns. The plant's raw water intake is located on Severn Creek. During warmer months, the pool of water at this location suffers from very low flow and high organic content. The Kentucky Division of Water and Owenton agreed that the intake

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<sup>22</sup> Engineering Feasibility Study at 2. In 2004, the Kentucky Division of Water recommended the Owenton WTP be expanded to include additional filters. Kentucky-American's Response to the AG's First Request for Information, Item 9 at 19.

<sup>23</sup> Engineering Feasibility Study at 2.

<sup>24</sup> *Id.*

should be relocated.<sup>25</sup> Without relocating the intake, Kentucky-American has strong concerns that the Owenton WTP's output will be unable to meet the requirements of Stage 2 Disinfectants and Disinfection Byproducts Rule, which will apply to the Northern Division in October 2013.<sup>26</sup>

Finally, the Northern Division lacks adequate water storage to provide reliable service. It currently has six water storage facilities with a total storage capacity of 1.096 million gallons ("MG").<sup>27</sup> Two of these facilities are elevated water storage tanks with a combined storage capacity of 500,000 gallons.<sup>28</sup> The remaining facilities are standpipe storage facilities. Of the two elevated water storage tanks, the Fairgrounds Water Storage Tank, which has a storage capacity of 400,000 gallons, is in poor condition and requires significant maintenance. Kentucky-American is currently unable to remove the facility from service for repair without a significant degradation in distribution system pressure that significantly reduces the quality of service. It has attempted to take the storage tank out of service multiple times to perform repair work. Each time, however, the system lost pressure and the repair work had to be aborted.<sup>29</sup>

To remedy these problems, Kentucky-American proposes the Northern Division Connection Project. This Project consists of three phases. Phase I involves the construction of a 16-inch transmission main from Kentucky River Station II ("KRS II"), which is located on the Franklin County-Owen County border, to the north side of

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<sup>25</sup> Kentucky-American's Response to Commission Staff's First Request for Information, Item 56.

<sup>26</sup> Engineering Feasibility Report at 3. Kentucky-American's Response to AG's First Request for Information, Item 8b.

<sup>27</sup> Kentucky-American's Response to Commission Staff's First Request for Information, Item 41.

<sup>28</sup> *Id.*

<sup>29</sup> *Id.* Item 55. See also Kentucky-American's Response to AG's Supplemental Request for Information, Item 11e.

Monterey, Kentucky. This transmission main, which is approximately 39,620 linear feet in length, will serve residents that are currently served by the Owenton WTP and that reside south of Monterey along US Highway 127. When all phases of construction are complete, the transmission main's primary purpose will be to supply water to a new 600,000 gallon storage tank outside of Owenton.<sup>30</sup>

Phase II continues the 16-inch transmission main north along US Highway 127 from Monterey and connects into the Owenton system in three locations: (1) into an existing 6-inch line near the intersection of Kentucky Highway 845 and US Highway 127; (2) into an existing 8-inch line on US Highway 127 near the intersection of US Highway 127 and Kentucky Highway 22; and (3) into an existing 6-inch line on Kentucky Highway 22 near Thomner Trailer Park Road. Phase II involves approximately 44,945 linear feet of 16-inch transmission main and appurtenances.<sup>31</sup>

Phase III involves the construction of a booster pump station and two elevated storage tanks. One of the storage tanks will be located on the north side of Monterey and will hold 300,000 gallons. The new booster pump station will have a rated pumping capacity of 2 MGD and will pump directly out of the 300,000-gallon elevated storage tank through the new 16-inch transmission main toward Owenton. The second elevated storage tank outside Owenton will have a capacity of 600,000 gallons.<sup>32</sup>

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<sup>30</sup> App. ¶ 7. Phase I also includes the decommissioning of the 117,000 gallon standpipe that is located at Monterey. Upon completion of the project, this standpipe will no longer be needed because potable water will be directly supplied to those who are currently served by the standpipe.

<sup>31</sup> App. ¶ 8.

<sup>32</sup> App. ¶ 9.

Upon completion of the Northern Division Connection Project, the Owenton WTP would be removed from service.<sup>33</sup> KRS II would supply virtually all of the Northern Division's water requirements.<sup>34</sup> Kentucky-American would cease purchases from Georgetown Municipal Water and Sewer Service, except for emergency purposes.

Kentucky-American estimates the total capital cost of the Northern Division Connection Project to be \$14,104,868.<sup>35</sup> Initially, Kentucky-American will periodically borrow from American Water Capital Corporation ("AWCC") on a short-term basis the necessary construction funds. AWCC provides short-term funding to Kentucky-American through its access to the commercial paper markets at the identical rates it receives.<sup>36</sup> Eventually, Kentucky-American expects to permanently finance its capital construction funding with 60-percent long-term debt and 40-percent common equity.<sup>37</sup>

#### PROCEDURE

On May 31, 2012, Kentucky-American submitted to the Commission its application for a Certificate. The Commission established this docket to consider that application and subsequently permitted the Attorney General ("AG") and Lexington-Fayette Urban County Government ("LFUCG") to intervene in this matter.

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<sup>33</sup> Kentucky-American is considering a number of options for the Owenton WTP after the project's completion. Kentucky-American's Response to Commission Staff's First Request for Information, Item 23. These options include using the facilities for Kentucky-American's own use and the sale or donation to some governmental agency to use as a training facility for police and fire departments. *Id.* Item 26; V.R. 10/16/2012; 12:21:36 – 14:22:07.

<sup>34</sup> Kentucky-American currently has no plans to discontinue purchases from Gallatin County Water District or Carroll County Water District No. 1. Kentucky-American's Response to AG's First Request for Information, Item 18.

<sup>35</sup> Engineering Feasibility Report, Appendix C.

<sup>36</sup> See, e.g., Case No. 2012-00393, *Application of Kentucky-American Water Company for Issuance of Indebtedness and Continued Participation With American Water Capital Corp.* (Ky. PSC Oct. 29, 2012) at 2-4.

<sup>37</sup> Kentucky-American's Response to AG's First Request for Information, Item 25.

After affording all parties an adequate opportunity to conduct discovery and submit written testimony, the Commission held an evidentiary hearing in this matter on October 16, 2012.<sup>38</sup> At this hearing the following persons testified: Cheryl Norton, President, Kentucky-American; Lance E. Williams, Director of Engineering, Kentucky-American; Keith Cartier, Vice-President of Operations, Kentucky-American; and Linda C. Bridwell, Manager of Rates and Regulation of Kentucky and Tennessee, Central Region, American Water Company.

Following this hearing, the Commission directed Kentucky-American to submit additional information. Kentucky-American filed this information with the Commission on October 26, 2012. Each party has submitted a written brief. As of November 15, 2012, this matter stood submitted for decision.

## DISCUSSION

### Legal Standard

No utility may construct any facility to be used in providing utility service to the public until it has obtained a Certificate from this Commission.<sup>39</sup> To obtain such a certificate, the utility must demonstrate a need for the facilities to be constructed and an absence of wasteful duplication.<sup>40</sup>

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<sup>38</sup> Pursuant to the Commission's Order of September 18, 2012, Kentucky-American published notice of this hearing in a newspaper of general circulation in all areas in which it provided water service. See Notice of Filing of Proof of Legal Publication (filed Oct. 15, 2012). By our Order of September 18, 2012, the Commission gave written notice of this hearing to the Frankfort-Franklin County Planning Commission and Owenton Planning and Zoning Commission in accordance with KRS 100.324(1).

<sup>39</sup> KRS 278.020(1).

<sup>40</sup> *Kentucky Utilities Co. v. Pub. Ser. Com'n*, 252 S.W.2d. 885 (Ky. 1952).

“Need” is defined as

. . . substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed and operated.

. . . the inadequacy must be due either to a substantial deficiency of service facilities, beyond what could be supplied by normal improvements in the ordinary course of business; or to indifference, poor management or disregard of the rights of consumers, persisting over such a period of time as to establish an inability or unwillingness to render adequate service.<sup>41</sup>

“Wasteful duplication” is defined as “an excess of capacity over need” and “an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties.”<sup>42</sup> To demonstrate that a proposed facility does not result in wasteful duplication, the applicant must demonstrate that a thorough review of all alternatives has been performed.<sup>43</sup> Selection of an alternative that is not the least-cost alternative does not necessarily result in wasteful duplication.<sup>44</sup> All relevant factors must be balanced.<sup>45</sup>

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<sup>41</sup> *Id.* at 890.

<sup>42</sup> *Id.*

<sup>43</sup> Case No. 2005-00142, *The Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for the Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky* (Ky. PSC Sept. 8, 2005).

<sup>44</sup> See *Kentucky Utilities Co. v. Pub. Ser. Com'n*, 390 S.W.2d 168, 175 (Ky. 1965). See also Case No. 2005-00089, *The Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity for the Construction of a 138 KV Electric Transmission Line in Rowan County, Kentucky* (Ky. PSC Aug. 19, 2005).

<sup>45</sup> *Id.* at 6.

## Adequacy of Service

To determine the adequacy of existing service, the Commission is guided by KRS 278.010(14), which defines “adequate service” as:

[H]aving sufficient capacity to meet the maximum estimated requirements of the customer to be served during the year following the commencement of permanent service and to meet the maximum estimated requirements of other actual customers to be supplied from the same lines or facilities during such year and to assure such customers of reasonable continuity of service.

To further define a water utility’s obligations to procure an adequate source of supply, we promulgated 807 KAR 5:066, Section 3(2)(c), which requires that “water supplied by any utility shall be . . . [f]rom a source reasonably adequate to provide a continuous supply of water.” We also promulgated 807 KAR 5:066, Section 10(4), which provides that “[t]he quantity of water delivered to the utility’s distribution system from all source facilities shall be sufficient to supply adequately, dependably and safely the total reasonable requirements of its customers under maximum consumption.”

Kentucky-American argues that the present facilities that provide water service within the Northern Division are inadequate and “create an unacceptable level of risk with regard to both the quality of water and the Company’s ability to satisfy normal demand.”<sup>46</sup> It points to the lack of redundancy in the Owenton WTP’s present treatment process that “prevents . . . [Kentucky-American] from maintaining safe operations if the treatment process is in any way disrupted.”<sup>47</sup> It further notes that the lack of sufficient filters renders the Owenton WTP unable to satisfy normal production demands.<sup>48</sup>

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<sup>46</sup> Kentucky-American’s Post-Hearing Brief at 9.

<sup>47</sup> *Id.* at 7.

<sup>48</sup> *Id.* at 8.

Finally, it notes that its current source of raw water, while meeting current water quality standards, is unlikely to meet more stringent standards that will shortly take effect.<sup>49</sup>

The Northern Division Connection Project, Kentucky-American argues, will effectively resolve these service inadequacies. As KRS II has a rated capacity of 20 MGD, it has adequate capacity. The construction of additional water storage capacity will enable Kentucky-American to repair and service the Northern Division's existing 400,000-gallon water storage tank. Moreover, the Project will provide needed redundancy. In the event that a main break occurs in the 16-inch transmission main, KRS II will supply points south of the main break while the storage tanks will provide temporary supply to the remaining parts of the system. The 16-inch main is a readily replaceable component which can easily be repaired and/or replaced.<sup>50</sup>

Neither the AG nor LFUCG dispute these arguments. The AG concedes in his brief that "[t]he evidence in the record demonstrates that KAW's [Kentucky-American's] water treatment plant serving its Northern Division . . . presents an undue risk of failure of service for those who rely upon it for drinking water."<sup>51</sup> He states that the record contains an "adequate demonstration of a substantial deficiency of service facilities."<sup>52</sup> In its brief, LFUCG is silent on the issue.

Based upon our review of the record, we find that the Northern Division presently lacks an adequate and reliable source of supply to meet the needs of its customers and that a substantial inadequacy of service currently exists. We further find the Owenton WTP is substantially deficient, that its present condition poses an unacceptable risk to

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<sup>49</sup> *Id.* at 8-9.

<sup>50</sup> Kentucky-American's Response to AG's First Request for Information, Item 17.

<sup>51</sup> AG's Brief at 4.

<sup>52</sup> *Id.* at 6.

the continuity of service, and that its present ability to meet new water quality standards is highly suspect.

#### Wasteful Duplication of Facilities

To resolve the service inadequacies that the Owenton WTP's present condition poses, Kentucky-American considered two options: (1) the Northern Division Connection Project and (2) upgrading and improving the Owenton WTP to remedy its deficiencies ("Owenton WTP Alternative").<sup>53</sup> After considering the capital costs and operation and maintenance expenses of each option, Kentucky-American found the Northern Division Connection Project to be the least-cost alternative.

The Owenton WTP Alternative includes: the construction of chemical storage facilities, the relocation of the Owenton WTP's raw intake; the construction of a new elevated water storage tank; the addition of central control capabilities to the Owenton WTP; the installation of generators to backup high-service pumps and raw-water

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<sup>53</sup> Kentucky-American also considered the possibility of increasing or commencing water purchases from neighboring water systems. These systems include Carroll County Water District No.1, Gallatin County Water District, Georgetown Municipal Water and Sewer Service, and Bullock Pen Water District. It found that all of these systems have limited infrastructure in place at the existing or potential connection points to the Northern Division system and that significant infrastructure improvements would be necessary on both sides of the connection point. Additionally, Carroll County Water District No.1, Georgetown Municipal Water and Sewer Service, and Bullock Pen Water District had limited water production capacity. Kentucky-American, therefore, did not pursue this option or contact any of these systems. Kentucky-American's Response to the AG's First Request for Information, Items 11 and 23; Kentucky-American's Response to Commission Staff's First Request for Information, Item 41. The AG argues that, as a result of this failure, Kentucky-American failed to perform a review of all relevant alternatives. He concedes, however, that "it is not clear that further research into additional alternatives would produce material benefit sufficient to outweigh the costs associated with a failure of the OWTP." AG's Brief at 6.

pumps, the addition of two filters; and the construction of a second claricone. Total estimated cost of these improvements is \$11.4 million.<sup>54</sup>

If only capital costs are compared, the Owenton WTP Alternative, with a price tag approximately \$2,704,868 less than the Northern Division Connection Project, appears to be the less-expensive alternative. When operating and maintenance (“O&M”) expenses are added to the calculations, however, the Northern Division Connection becomes the less-costly alternative. Kentucky-American’s projections show that in the first year of operations the Northern Division Connection Project will have O&M expenses that are \$608,000 less than the Owenton WTP Alternative. This difference grows to \$744,000 by 2020.<sup>55</sup> The savings from lower O&M expenses erase any difference in capital costs within three years of operation.<sup>56</sup>

Of the two alternatives, the Northern Division Connection Project has the least effect on Kentucky-American’s revenue requirements. In the first year of operations, it would increase Kentucky-American’s annual revenue requirement by \$1,140,345.<sup>57</sup> In contrast, the Owenton WTP Alternative would increase Kentucky-American’s annual

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<sup>54</sup> A breakdown of these costs is shown below.

<b>Improvement</b>	<b>Cost</b>
Chemical Bulk Storage	\$ 2,100,000
Pretreatment Reliability	\$ 1,200,000
Residuals Handling	\$ 1,800,000
Filter Reliability	\$ 1,700,000
Emergency Power Reliability	\$ 600,000
Supervisory Control and Data Acquisition	\$ 300,000
Rate Water Intake	\$ 1,400,000
New Storage Tank	<u>\$ 2,300,000</u>
Total	<u>\$11,400,000</u>

Engineering Feasibility Study at 5.

<sup>55</sup> *Id.* at 8.

<sup>56</sup> *Id.* Appendix F.

<sup>57</sup> Kentucky-American’s Response to Hearing Data Requests, Item 11.

revenue requirement by \$1,524,383.<sup>58</sup> Kentucky-American estimates that, over the first 10 years following the project's completion, its revenue requirement will be lowered by \$5,372,187 if the Northern Division Connection Project option is selected.<sup>59</sup> According to Kentucky-American's projections, the Northern Division Connection Project will produce a lesser effect on its annual revenue requirements for at least the first 21 years following its completion.

Neither the AG nor LFUCG dispute these cost projections or revenue requirements analysis. Neither suggests that the Northern Division Connection Project is not the least-cost alternative or that its construction will result in the wasteful duplication of facilities.

Based upon our review of the record, the Commission finds that the consideration of projected O&M expenses in weighing the cost of various alternatives is appropriate and consistent with past Commission practice.<sup>60</sup> Having considered all appropriate costs, we find that the Northern Division Connection Project option is reasonable, is the least-cost alternative, and will not result in wasteful duplication of facilities.

#### Allocation of Costs

The AG and LFUCG raise questions regarding the allocation of the cost of the proposed facilities. The AG suggests that, in light of the known inadequacies of the Owenton water system, Kentucky-American's acquisition of that system was unreasonable. In discovery questions, he has further suggested that the costs of the

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<sup>58</sup> *Id.*

<sup>59</sup> *Id.*

<sup>60</sup> See, e.g., Case No. 2007-00134, *The Application of Kentucky-American Water Company for a Certificate of Convenience and Necessity Authorizing the Construction of Kentucky River Station II Associated Facilities and Transmission Main* (Ky. PSC Apr. 25, 2008).

Northern Division Connection Project should be allocated to Northern Division customers only.<sup>61</sup> In its Brief, LFUCG argues that none of the costs associated with the Northern District Connection Project should be allocated to customers within the Central Division because “[t]he proposal does not benefit the Central Division and may ultimately harm it by reducing the amount of water available to it in the event of a drought . . . .”<sup>62</sup>

The record raises serious questions with significant ramifications. The AG has suggested that Kentucky-American acted in a reckless manner and with indifference to and in “disregard of the rights of consumers” in its acquisition and operation of the Owenton water system.<sup>63</sup> Having never been afforded the opportunity to evaluate the reasonableness of the acquisition<sup>64</sup> in light of the required improvements necessary to correct the Owenton water system’s inadequacies, we lack a full and complete record to evaluate the AG’s contentions. Clearly, if Kentucky-American acted in an unreasonable or imprudent manner in its acquisition of the Owenton water system, then the disallowance of any unreasonable costs resulting from that acquisition may be required.

LFUCG’s argument poses a larger policy question: How should the costs associated with regional expansion and consolidation be allocated? For many years,

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<sup>61</sup> See, e.g., AG’s Supplemental Request for Information, Item 14.

<sup>62</sup> LFUCG Brief at 3.

<sup>63</sup> AG Brief at 2.

<sup>64</sup> See *supra* notes 12 and 13 and accompanying text.

this Commission has promoted regionalization.<sup>65</sup> In particular, we have encouraged Kentucky-American to become a regional water supplier and to acquire smaller, less efficient systems.<sup>66</sup> Regionalization, however, is not without costs. We have promoted the use of a unified rate where the absorption of a smaller system would lead to large pricing disparities between customers on the acquirer's existing system and those on the newly acquired system.<sup>67</sup>

While the unified rate has generally resulted in price reductions for the acquired customers, it also creates the potential for possible increases in existing customers' rates and, by requiring existing customers to bear a portion of the cost of upgrading and improving facilities that serve only the acquired customers, raises the question of fairness. Assuming for argument's sake that a portion of the cost may properly be placed upon existing customers, this Commission has seldom explored, much less defined, the limits of such cost shifting. We also have not established the limits, if any,

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<sup>65</sup> For example, pursuant to KRS 74.361, the Commission has also encouraged and promoted the merger of water districts. See, e.g., Case No. 90-020, *Investigation into the Feasibility of Merging Kenton County Water District No. 1, Campbell County Kentucky Water District, and Boone County Water and Sewer District* (Ky. PSC Jan. 31, 1990); Case No. 9602, *The Proposed Merger of the Laurel County Water District No. 2, the West Laurel Water Association, the East Laurel Water District, and the Wood Creek Water District* (Ky. PSC June 16, 1986); Case No. 9327, *The Proposed Merger of Henry County Water District and Henry County Water District No. 2* (Ky. PSC Dec. 20, 1985).

<sup>66</sup> See, e.g., Case No. 89-348, *Notice of Adjustment of Rates of Kentucky-American Water Company Effective On January 28, 1989* (Ky. PSC June 28, 1990) at 24 ("The Commission has and will continue to encourage Kentucky-American to become a regional supplier of water . . ."); Case No. 9283, *Notice of Adjustment of Rates of Kentucky-American Water Company Effective on and after April 19, 1982* (Ky. PSC Oct. 1, 1985) at 14 ("The Commission commends Kentucky-American for pursuing the goal of serving as a regional water supplier . . . [and] encourages Kentucky-American to pursue supply contracts with the adjacent districts . . .").

<sup>67</sup> See, e.g., Case No. 2004-00103, *Adjustment of the Rates of Kentucky-American Water Company* (Ky. PSC Feb. 28, 2005); Case No. 9926, *Application of Lexington-South Elkhorn Water District and Kentucky-American Water District for the Approval of the Purchase of the Assets of Lexington-South Elkhorn Water District, for Approval of Rates to be Charged Within the Boundaries of the Lexington-South Elkhorn Water District after Acquisition and for a Certificate of Public Convenience and Necessity Authorizing the Construction of Certain Improvements* (Ky. PSC Sept. 23, 1987) at 6 (stating that the Commission considers the reduction of acquired customers' rates as "the ultimate goal for Kentucky-American's regional supplier efforts"). *But see* Case No. 9283, *supra*, at 14 ("Kentucky-American should be aware that the cost allocation and rate design method approved for the Urban County will not automatically be considered appropriate by the Commission for service to other counties.").

that can be placed on the recovery of the costs of improving and upgrading facilities of acquired systems from **all** ratepayers.

In this proceeding, the only relief that the applicant seeks is the issuance of a Certificate to construct new facilities. No rate adjustment or change in rate design is sought. Questions regarding the appropriate ratemaking treatment for the cost of the proposed facilities or the allocation of their costs, therefore, are best not addressed here but should be deferred to Kentucky-American's upcoming rate proceeding.<sup>68</sup> We place the parties on notice that the questions that the AG and LFUCG have raised will be considered in that rate proceeding. All parties should be prepared to address those questions.

#### FINDINGS AND CONCLUSIONS

Having considered the evidence of record and being otherwise sufficiently advised, the Commission makes the following findings of fact:

1. Kentucky-American owns and operates facilities in the Commonwealth of Kentucky that develop, pump, distribute, and furnish water to the public for compensation.
2. Kentucky-American has divided its operations into two divisions: Northern Division and Central Division. These divisions are not physically connected.
3. The Northern Division serves approximately 3,882 customers in Gallatin, Owen, and Grant Counties.
4. The Owenton WTP furnishes approximately 88.2 percent of the Northern Division's total water supply. The Northern Division purchases the remaining 11.8 percent from Carroll County Water District No. 1, Gallatin County Water District, and

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<sup>68</sup> Case No. 2012-00520, *Application of Kentucky-American Water Company for an Adjustment of Rates Supported by a Fully Forecasted Test Year* (Ky. PSC filed Dec. 28, 2012).

Georgetown Municipal Water and Sewer Service. Approximately 683 Northern Division customers are supplied with purchased water.

5. The Owenton WTP has design capacity of 1.44 MGD.

6. Since 2006, the Owenton WTP's average daily production has been 830,000 gallons.

7. The Owenton WTP's primary sources of supply are Severn Creek, which is near the Kentucky River, and an impoundment that Owenton owns.

8. The Northern Division currently has six water storage facilities with a total storage capacity of 1.096 MG. Two of these facilities are elevated water storage tanks with a combined storage capacity of 500,000 gallons.

9. The Northern Division's treatment and distribution facilities have the following deficiencies:

a. The Owenton WTP relies on a single claricone for treatment. If this claricone fails or requires repair or maintenance, the water treatment plant is unable to produce any water. Given existing water storage capacity, if the claricone is out of service for more than a few hours, a significant portion of the Northern Division will be unserved.

b. The Owenton WTP lacks an adequate number of filters to satisfy normal production demands.

c. The Owenton WTP lacks back-up emergency power.

d. The Fairgrounds Water Storage Tank, which has a storage capacity of 400,000 gallons, is in poor condition and requires significant maintenance, but cannot be removed from service for repair without a significant degradation in distribution system pressure that significantly reduces the quality of service.

e. The Owenton WTP's chemical storage facilities are undersized, do not provide for proper storage and containment of required chemicals, have led to inefficient and uneconomical procurement practices, and pose some environmental risks.

f. During warmer months, the pool of water at the current location of Owenton WTP's raw intake suffers from very low flow and high organic content, requiring additional treatment and significantly increasing the likelihood that the treatment plant's output will be unable to meet the requirements of the Stage 2 Disinfectants and Disinfection Byproducts Rule unless the intake is relocated.

g. The Owenton WTP lacks adequate facilities for residuals processing.

10. Kentucky-American proposes to correct these problems by supplying the Northern Division from KRS II. This proposal involves the construction of 84,565 linear feet of 16-inch water transmission main from KRS II to three points on the Northern Division's distribution system, a 2-MGD booster station, a 600,000-gallon elevated water storage tank, and a 300,000-gallon elevated water storage tank.

11. The estimated total cost of the proposed facilities, including construction overhead and contingencies, is \$14,104,868.

12. In lieu of the Northern Division Connection Project, capital improvements to the Owenton WTP and the Northern Division's distribution system to address their deficiencies can be undertaken. These improvements include: the construction of chemical storage facilities; the relocation of the Owenton WTP's raw intake; the construction of a new elevated water storage tank; the addition of central control capabilities to the Owenton WTP; the installation of generators to backup high-service

pumps and raw-water pumps; the addition of two filters; and the construction of a second claricone.

13. The estimated total cost of the Owenton WTP Alternative's capital improvements are \$11.4 million.

14. Based solely on the costs of the capital improvements, the cost of the Owenton WTP Alternative is \$2,704,868 less than the cost of the Northern Division Connection Project.

15. O&M expenses associated with the Northern Division Connection Project are considerably lower than those with the Owenton WTP Alternative. At the end of its first 10 years of operation, the Northern Division Connection Project will have O&M expenses that are \$11,364,316 less than those incurred under the Owenton WTP Alternative.

16. Implementation of Northern Division Connection Project results in a lesser increase to Kentucky-American's revenue requirements than the Owenton WTP Alternative.

Based upon the above, the Commission makes the following conclusions of law:

1. Kentucky-American is a utility as defined in KRS 278.010(3)(d) and is subject to Commission jurisdiction.

2. The proposed facilities are not extensions in the ordinary course of business.

3. KRS 278.020(1) requires Kentucky-American to obtain a Certificate from the Commission prior to commencing construction of the proposed facilities.

4. KRS 278.030 requires Kentucky-American to provide "adequate, efficient and reasonable service."

5. 807 KAR 5:066, Section 3(2)(c), requires that “water supplied by any utility shall be . . . [f]rom a source reasonably adequate to provide a continuous supply of water.”

6. 807 KAR 5:066, Section 10(4), provides that “[t]he quantity of water delivered to the utility’s distribution system from all source facilities shall be sufficient to supply adequately, dependably and safely the total reasonable requirements of its customers under maximum consumption.”

7. As a result of the current conditions at the Owenton WTP set forth in finding paragraph 9, Kentucky-American’s existing service to the Northern Division is not adequate.

8. Construction of the Northern Division Connection Project is economically feasible and necessary to enable Kentucky-American to provide adequate service to its Northern Division.

9. Construction of the proposed facilities will not result in wasteful duplication of facilities.

10. The public convenience and necessity require construction of the proposed facilities.

IT IS THEREFORE ORDERED that:

1. Kentucky-American is granted a Certificate to construct the Northern Division Connection Project facilities as set forth in its application.

2. Kentucky-American shall obtain the approval of the Commission prior to performing any additional construction not expressly authorized by this Order.

3. Any deviation from the construction approved shall be undertaken only with the prior approval of the Commission.

4. Kentucky-American shall furnish documentation of the total costs of this project including the cost of construction and all other capitalized costs, including, but not limited to, engineering, legal, and administrative expenses, within 60 days of the date construction is substantially completed. Construction costs shall be classified into appropriate plant accounts in accordance with the Uniform System of Accounts for water utilities prescribed by the Commission.

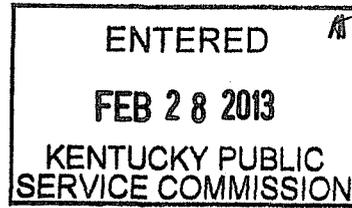
5. Kentucky-American shall file with the Commission a copy of the "as-built" drawings and a certified statement the construction has been satisfactorily completed in accordance with the contract plans and specifications within 60 days of the substantial completion of the construction certificated herein.

6. Kentucky-American shall require construction to be inspected under the general supervision of a licensed professional engineer, with a Kentucky registration in civil or mechanical engineering, to ensure that the construction work is completed in accordance with the contract drawings and specifications, and in conformance with the best practices of the construction trades involved in the project.

7. Kentucky-American shall notify the Commission seven days prior to the actual start of construction and at the 50 percent completion point.

8. Any documents filed in the future pursuant to ordering paragraphs 4, 5, and 7 of this Order shall reference this case number and shall be retained in the utility's general correspondence file.

By the Commission



ATTEST:

  
Executive Director

Case No. 2012-00096

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