

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF JESSAMINE-SOUTH)	
ELKHORN WATER DISTRICT FOR A)	CASE NO.
CERTIFICATE OF PUBLIC CONVENIENCE AND)	2014-00084
NECESSITY TO CONSTRUCT AND FINANCE A)	
WATERWORKS IMPROVEMENT PROJECT)	
PURSUANT TO KRS 278.020 AND 278.300)	

O R D E R

On March 7, 2014, Jessamine-South Elkhorn Water District (“JSEWD”) tendered an application requesting a Certificate of Public Convenience and Necessity (“CPCN”) to either construct a 750,000-gallon elevated water storage tank and related appurtenances or, in the alternative, if the Commission determines there is no need for a tank of that size, for a 500,000 gallon elevated water storage tank. JSEWD further requested approval to finance construction of the elevated water storage tank, but did not identify specific financing terms such as interest rates, amount borrowed, or length of payment.

In its application, JSEWD requested incorporation by reference, Case No. 2012-00470, in which JSEWD applied for a CPCN and approval of financing for construction of a one million-gallon elevated water storage tank.¹ In the Commission’s April 30, 2013 Final Order in Case No. 2012-00470, the Commission found that JSEWD needed additional water storage capacity, but that JSEWD failed to demonstrate a need for an

¹ Case No. 2012-00470, *Application of Jessamine-South Elkhorn Water District for a Certificate of Public Convenience and Necessity to Construct and Finance a Waterworks Improvements Project Pursuant to KRS 278.020 and 278.300* (filed Oct. 26, 2012).

additional one million gallons of water storage capacity or that the construction of the one million-gallon elevated water storage tank would not result in excessive or wasteful investment.² The Commission denied JSEWD's application in Case No 2012-00470 to construct and finance a one million-gallon elevated water storage tank.³

JSEWD requested a deviation in its March 7, 2014 application from certain filing requirements, indicating that documents required to be submitted with an application for a CPCN would be filed when the Commission issued a decision authorizing construction of either the 500,000- or 750,000-gallon elevated water storage tank.

On March 24, 2014, the Commission issued an Order granting JSEWD's request to incorporate by reference Case No. 2012-00470, but ruled that JSEWD's application would not be accepted for filing until JSEWD tendered the required documents for the tank size that JSEWD believes its infrastructure requires.

After JSEWD filed the required documentation for an application for a CPCN on August 21, 2014, the Commission notified JSEWD that its application for issuance of a CPCN for a 750,000-gallon elevated water storage tank met minimum filing requirements. The Commission clarified in its October 13, 2014 Order that only the portion of JSEWD's application for authorization of a CPCN would be considered filed. The portion of JSEWD's application for approval of financing would not be accepted for filing until JSEWD completed and filed the terms of the financing arrangement. As of today, JSEWD has not filed the terms of the financing arrangement and its application for authorization to finance an elevated water storage tank has not been accepted for filing.

² *Id.* (Ky. PSC Apr. 30, 2013), Order at 5 and 13.

³ *Id.*

JSEWD is a water district organized pursuant to KRS Chapter 74. It owns and operates two water distribution systems that serve approximately 2,755 customers in Jessamine County, Kentucky.⁴ JSEWD also operates a sewer collection system that serves 614 customers in Jessamine County.⁵

The water district serves two distinct non-contiguous areas in opposite corners in Jessamine County.⁶ JSEWD purchases water from the city of Nicholasville to distribute to JSEWD's Southeast service area.⁷ For the Northwest service area, JSEWD purchases water from Kentucky-American Water Company ("KAWC") to serve the 2,346 customers in JSEWD's Northwest service area.⁸

Two elevated water storage tanks with a total storage capacity of 550,000 gallons currently serve the Northwest service area. A 50,000-gallon storage tank is located on Old U.S. 68, also known as Harrodsburg Road. A 500,000-gallon tank is located on Parks Lane in the Harrods Ridge Subdivision.⁹

JSEWD proposes to construct the 750,000-gallon water storage tank in the Northwest service area on the same one-acre site where JSEWD proposed to construct

⁴ *Annual Report of Jessamine-South Elkhorn Water District (Water Division) to the Kentucky Public Service Commission for the Year Ended December 31, 2013* at 12 and 53.

⁵ *Annual Report of Jessamine-South Elkhorn Water District (Sewer Division) to the Kentucky Public Service Commission for the Year Ended December 31, 2013* at 9 and 25

⁶ Application, Exhibit A, Storage Analysis, Figure 1 map at 1- 2.

⁷ *Id.* at 2.

⁸ *Id.* at 4-5. According to the Storage Analysis, JSEWD also purchases water from the city of Wilmore to serve one customer, Francis Asbury Society.

⁹ John G. Horne Rebuttal Testimony (filed Jan. 14, 2015) at 7.

the one million-gallon storage tank.¹⁰ The site is known as the Switzer site¹¹ and is located next to the Forest Hills Estates subdivision in Jessamine County.

According to JSEWD's Board of Commissioner minutes, JSEWD began searching for an appropriate location for a new tank in early 2001.¹² More than three years later, by deed dated May 10, 2004, JSEWD became owners of the Switzer site.¹³

During the following year, JSEWD learned that a developer, Forest Hills Development, LLC, proposed to build a residential subdivision on the acreage next to the Switzer site. On behalf of JSEWD, Horne Engineering, Inc. mailed a letter on November 11, 2005, to Forest Hills Development, LLC, alerting the developer that JSEWD planned to construct a one million-gallon elevated water storage tank on property adjacent to the proposed residential subdivision. Horne Engineering, Inc. further advised the developer that the developer should advise purchasers of lots in the subdivision of JSEWD's plan to construct a one million-gallon elevated water storage tank on the one-acre Switzer site.¹⁴

PROCEDURE

The Commission permitted Forest Hills Resident's Association, Inc. ("Forest Hills") and the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention, ("AG") to intervene in this case. Forest Hills also intervened

¹⁰ Application at 4.

¹¹ L. Nicholas Strong Rebuttal Testimony (filed Jan 14, 2015), Exhibit A at 2.

¹² *Id.*, referencing meeting minutes.

¹³ *Id.* at 3.

¹⁴ Comm. Staff – [Hearing] Exhibit 1, Letter from John G. Horne, President, Horne Engineering, Inc. to Barry Mangold, Forest Hills Development, LLC (Nov. 11, 2005).

in Case No. 2012-00470. All parties were given an adequate opportunity to conduct discovery prior to the evidentiary hearing held on February 11 and 12, 2015.¹⁵

Testifying on behalf of JSEWD during the hearing were Dallam B. Harper, Jr., formerly with the Bluegrass Area Development District; John G. Horne and L. Christopher Horne, with Horne Engineering, Inc.; William L. Berkley, Jr., with Bluegrass Valuation Group, LLC/Real Estate Appraisers; and L. Nicholas Strong, chair of JSEWD's Board of Commissioners. Testifying on behalf of Forest Hills during the hearing were T. Logan Davis, a resident in Forest Hills Estates subdivision; G. Michael Ritchie, with Photo Science Geospatial Solutions and Quantum Spatial, Inc. ("Photo Science"); and E. Clark Toleman, certified real estate appraiser. Several owners of property in Forest Hills Estates subdivision made public comments at the beginning of the hearing. A written public comment was also filed in the record.

As instructed by the Commission during the hearing, Forest Hills and JSEWD filed their respective post-hearing documentation on March 11, 2015. Each party filed briefs, and this matter stood submitted on April 8, 2015.

DISCUSSION

No utility may construct any facility to be used in providing utility service to the public until it has obtained a CPCN from this Commission.¹⁶ The utility must demonstrate a need for the facilities to be constructed and an absence of wasteful duplication to obtain a CPCN.¹⁷

¹⁵ Pursuant to the Commission's January 29, 2015 Order, the Commission gave written notice of this hearing to the Jessamine County-City of Wilmore Joint Planning Commission in accordance with KRS 100.324(1).

¹⁶ KRS 278.020(1).

¹⁷ Kentucky Utilities Co. v. Pub. Ser. Com'n, 252 S.W.2d 885 (Ky. 1952).

“Need” is defined as:

[S]ubstantial 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.

[T]he 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.¹⁸

“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.”¹⁹ To demonstrate that a proposed facility does not result in wasteful duplication, the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed.²⁰ Selection of an alternative that is not the least-cost alternative does not necessarily result in wasteful duplication.²¹ All relevant factors must be balanced.²²

¹⁸ *Id.* at 890.

¹⁹ *Id.*

²⁰ Case No. 2005-00142, *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a 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) at 11.

²¹ See *Kentucky Utilities Co. v. Pub. Ser. Com'n*, 390 S.W. 2d 168, 175 (Ky. 1965). See also Case No. 2005-00089, *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).

²² *Id.* at 6.

The first issue, need for additional storage capacity, has already been decided. In Case No 2012-00470, the Commission found that JSEWD's Northwest service area²³ is not in compliance with 807 KAR 5:066, Section 4(4),²⁴ and needs additional water storage capacity.

The record clearly shows that the Northwest Service Area needs additional storage capacity. Pursuant to KRS 278.280(2), the Commission has promulgated 807 KAR 5:066, Section 4(4), which requires that a water system have minimum storage capacity "equal to the average daily consumption." The Northwest Service Area has an average daily consumption of 709,200 gallons. Currently, the total storage capacity presently available for the Northwest Service Area is only 550,000 gallons.²⁵

JSEWD had a deficit of 159,200 gallons based on *minimum* storage requirements pursuant to 807 KAR 5:066, Section 4(4).²⁶ Forest Hills was a party in Case No. 2012-00470 and did not contest the Commission's finding in Case No. 2012-00470 that JSEWD needs additional water storage capacity. No question exists that KAWC²⁷ and the city of Nicholasville²⁸ do not have storage capacity available for JSEWD.

²³ As already indicated, JSEWD serves two distinct non-contiguous areas in opposite corners of Jessamine County. The Commission considered the average daily demand and the storage capacity of the Northwest service area only. The average daily demand and storage capacity of the Southwest service area is not relevant in this case.

²⁴ Case No. 2012-00470, *Jessamine-South Elkhorn Water District* (Apr. 30, 2013), Order at 13.

²⁵ Case No 2012-00470, *Jessamine-South Elkhorn Water District* (Apr. 30, 2013), Order at 5. Footnotes omitted.

²⁶ *Id.*

²⁷ March 18, 2014 Letter from Cheryl D. Norton, President, KAWC, to Jeff Derouen, Executive Director, Public Service Commission (filed Mar. 20, 2014).

²⁸ JSEWD's Response to Forest Hills' Request for Information (filed Oct. 15, 2014), Item 20. October 2, 2014 Letter from Tom Calkins, Public Utilities Director, city of Nicholasville, to Nick Strong, Chairman, JSEWD's Board of Commissioners.

In a post-hearing brief ("Brief"), the AG supports granting JSEWD's application for a CPCN to construct the 750,000-gallon elevated water storage tank. Forest Hills avers in its brief in this case that a need for additional water storage capacity does not exist but fails to point to any evidence that JSEWD's current water storage capacity in the Northwest service area is equal to or greater than the average daily consumption in the Northwest service area.

JSEWD's current application is for construction of a 750,000-gallon water storage tank. The Commission found in Case No. 2012-00470 that JSEWD had not demonstrated a need for an additional one million gallons of water storage capacity or that the construction of a one million-gallon water storage tank would not result in excessive or wasteful investment. JSEWD has now shown a need for an additional 750,000 gallons of water storage capacity and has demonstrated that construction of a 750,000-gallon elevated water storage tank will not result in excessive or wasteful investment. The evidence supporting these findings is discussed below.

Storage Analysis

According to Horne Engineering, Inc, generally accepted engineering practices include equalization storage, emergency storage, and fire-protection storage when determining water storage capacity needs.²⁹

²⁹ Application, Exhibit A, Storage Analysis at 9, citing Water Distribution System Handbook, Larry W. Mays, McGraw-Hill Handbook; Principles and Practices of Water Supply Operations, Water Transmission and Distribution, Fourth Edition, AWWA; Water Supply Systems and Evaluation Methods, Volume II, October 2008, US Fire Administration FEMA; Computer Modeling of Water Distribution Systems, M-32, Third Edition, AWWA.

Equalization storage is determined by multiplying a factor by the maximum day demand. Forest Hills did not dispute the use of 1,784,250 gallons of water as the maximum day demand in 2010.³⁰ Instead of using just one source to determine the factor, Horne Engineering, Inc. averaged the recommendations of four different sources and used a factor of 30 percent to calculate equalization storage.³¹

Forest Hills incorrectly claims that two of the four sources cited by Horne Engineering, Inc. support using a lower equalization factor.³² One of the four sources recommends a factor of 15 to 30 percent.³³ Another of the four sources states that “equalization storage could exceed 30% for small service areas or arid climates,”³⁴ which Forest Hills implies to mean that the factor for JSEWD’s Northwest service area should be less than 30 percent. In the same paragraph of its Brief, Forest Hills cites to a storage capacity analysis prepared for KAWC on December 21, 2005, (“2005 KAWC Storage Analysis”)³⁵ to support Forest Hills’ argument that Horne Engineering, Inc. should have used an equalization factor of 12 percent to 15 percent, as used in the 2005 KAWC Storage Analysis, to calculate equalization storage for JSEWD.

The 2005 KAWC Storage Analysis indicates that using the lower percentage suggested by Forest Hills for the JSEWD Northwest service area is inappropriate.

³⁰ The year 2010 was selected to coincide with the most recent census year.

³¹ Application, Exhibit A, Storage Analysis at 24.

³² Forest Hills’ Brief at 7-8.

³³ Application, Exhibit A, Storage Analysis at 23.

³⁴ Forest Hills’ Brief at 8, citing Application, Exhibit A, Storage Analysis at 23.

³⁵ Case No 2005-00546, *Application of Kentucky-American Water Company for a Determination by the Public Service Commission of the Adequacy of Its Water Storage Capacity Analysis Dated December 21, 2005 and for a Deviation from 807 KAR 5:066, Section 4(4), until December 31, 2020, Pursuant to 807 KAR 5:066, Section 18* (filed Dec. 22, 2005), Application, Exhibit 1.

According to the 2005 KAWC Storage Analysis, the equalization storage was based on a maximum-day demand of 70,230,000 gallons of water.³⁶ JSEWD's Northwest service area maximum day demand in 2010, the period considered by Horne Engineering, Inc. when preparing JSEWD's storage analysis, was 1,784,250 gallons. Based on the maximum day demands, KAWC's system would have been nearly 40 times larger than JSEWD's Northwest service area.

The 2005 KAWC Storage Analysis indicates that "[e]qualization factors generally decrease as the size of the system becomes larger."³⁷ As indicated by the maximum day demand, according to the 2005 KAWC Storage Analysis, KAWC had a larger system than JSEWD's Northwest service area. Because KAWC has a larger system than JSEWD's system in the Northwest service area, the equalization factor used in the 2005 KAWC Storage Analysis should be lower than the equalization factor used for JSEWD's storage analysis.

Based on its own arguments, Forest Hills establishes the appropriateness of the 30 percent equalization factor. Comparing the maximum day demand of JSEWD's Northwest service area to KAWC's maximum day demand indicates that JSEWD's Northwest service area is a small service area and the equalization factor could exceed 30 percent.³⁸ The 2005 KAWC Storage Analysis indicating a larger factor for smaller systems supports the reasonableness of the 30 percent factor used by Horne Engineering, Inc. for JSEWD's Northwest service area storage analysis. Horne

³⁶ *Id.* at 6 and 18.

³⁷ *Id.* at 7.

³⁸ Application, Exhibit A, Storage Analysis at 23.

Engineering, Inc.'s selection of a 30 percent equalization factor is supported both by averaging the equalization factor from the four sources cited by Horne Engineering, Inc. and the equalization factor information provided in the 2005 KAWC Storage Analysis.

JSEWD presented credible evidence that the requirement for equalization storage in JSEWD's Northwest service area is 535,275 gallons (2010 maximum daily demand of 1,784,250 gallons X .30) gallons of water.

One of the components of emergency storage is average daily demand. For JSEWD's Northwest service area, Horne Engineering, Inc. used the average daily demand of 743,659 gallons of water in 2010.³⁹ Forest Hills incorrectly argues that the Commission found in Case No. 2012-00470 that JSEWD's 2010 average daily demand in the Northwest service area was 619,353 gallons.⁴⁰

The Commission did not make a finding in Case No 2012-00470 regarding JSEWD's 2010 average daily *demand* in the Northwest service area. On page 8 of the April 30, 2013 Order in Case No 2012-00470, the Commission restates Forest Hills' arguments. Forest Hills argued in Case No. 2012-00470 that the Commission should not grant JSEWD's request for authorization to construct a one million-gallon elevated water storage tank because JSEWD's average daily *consumption* between 2006 and 2010 was between 93 percent and 125 percent of JSEWD's present storage capacity in the Northwest service area. Forest Hills referenced figures provided on January 2,

³⁹ *Id.* at 30.

⁴⁰ Forest Hills' Brief at 5.

2013, by JSEWD in response to Forest Hills' Supplemental Request for Information, Item 16, in Case No. 2012-00470.⁴¹

On January 2, 2013, JSEWD provided documents titled *Monthly Listing (Billing/Usage)* for 2006, 2007, 2008, 2009, and 2010 in response to Forest Hills' Supplemental Request for Information, Item 16, filed in Case No. 2012-00470. The amount billed is not the same as *demand*. Demand includes amounts of water that are not billed but are used for system flushing, water used by the fire department, water lost due to line breaks, as well as other water loss due to line leaks. The amount of gallons for average daily *demand* is greater than the amount of gallons for average daily amounts billed.

Forest Hills incorrectly argues in its Brief in this case that “witness after witness disclaimed any knowledge of how or why [JSEWD] used demand calculations in this case that overstate its usage by 20%, or over 124,000 gallons”⁴² during the evidentiary hearing. Not only did Christopher Horne present testimony during the evidentiary hearing regarding the source for the average daily demand figure, he identified the source documents previously filed in the record.⁴³

Christopher Horne testified during the evidentiary hearing that JSEWD provided the average daily demand figure.⁴⁴ The hydraulic analysis, in the Summary section

⁴¹ Case No 2012-00470, *Jessamine-South Elkhorn Water District* (Ky. PSC Apr. 30, 2013), Order at 8.

⁴² Forest Hills' Brief at 6. Emphasis removed.

⁴³ VR 02/10/2015 Hearing Transcript at 16:04:18–16:06:18.

⁴⁴ *Id.* At the beginning of the hearing, the Commission excused JSEWD's Manager, Glenn Smith, as a witness after all parties indicated they had no questions for Mr. Smith. VR 2/10/2014 Hearing Transcript at 10:22:59.

describing Total System Demand, states that the “average day demand of 516.43 [gallons per minute] . . . is based on the average daily demand for the year 2010 per manual meter readings” by JSEWD’s district manager.⁴⁵ The 743,659 gallons of average daily demand is calculated by multiplying 516.43 gallons per minute by 1,440 minutes (the number of minutes in one day).

The hydraulic analysis indicates that the 2010 totals were derived from the two Clays Mill Road meters and two Keene Road meters that serve the Northwest service area.⁴⁶ During the hearing, Christopher Horne stated that the total for Clays Mill Road meter 1 is incorrectly identified under the Total System Demand section of the hydraulic analysis.⁴⁷ The correct amount for Clays Mill Road meter 1 is 265,483,000 gallons. The figures for both Clays Mill Road meters are supported by documentation of the flow summaries from the daily JSEWD telemetry readings.⁴⁸ The readings for the two Keene Road meters are taken manually.

The total for the Clays Mill Road meter 1 is 265,483,000 gallons and the total for Clays Mill Road meter 2 is 4,695,000 gallons based on the documentation of the flow summaries from the daily JSEWD telemetry readings for 2010. The total for the two Keene Road meters is 730,500 gallons. The 2010 readings for the four meters total 270,908,500 gallons, which divided by 365 days equal 742,215. The difference⁴⁹

⁴⁵ Application, Exhibit I, Christopher Horne pre-filed Testimony, Hydraulic Analysis.

⁴⁶ *Id.*

⁴⁷ VR 02/10/2015 Hearing Transcript at 16:05:39.

⁴⁸ Application, Exhibit I, Christopher Horne pre-filed Testimony, Hydraulic Analysis.

⁴⁹ The difference is 0.194 percent.

between the average daily demand figure of 743,659 gallons used by Horne Engineering, Inc. and the average daily demand figure of 742,215 is insignificant.

Based on JSEWD's experience, Horne Engineering, Inc. calculated that JSEWD needs 25 percent of the average daily demand for emergency storage. Using Horne Engineering, Inc.'s factor of 25 percent, the needed emergency water storage capacity is 185,915 (.25 X 743,659) gallons.

According to the 2005 KAWC Storage Analysis that Forest Hills cited to support its argument for a lower equalization storage factor, a factor of 25 percent for emergency storage is a conservative estimate.⁵⁰ The 2005 KAWC Storage Analysis indicates that 100 percent of the average daily demand has been used to determine emergency storage, under the theory that the purpose of 807 KAR 5:066, Section 4(4), is for emergency storage.⁵¹ While Forest Hills argues that the 25 percent factor for emergency storage is based upon the unsupported opinion of Horne Engineering, Inc., Forest Hills did not present a different factor and further presented no authority for a different method to calculate emergency storage. The Commission finds JSEWD's use of a 25 percent factor for emergency water storage capacity, resulting in a need for 185,915 gallons, to be reasonable.

Forest Hills argues that JSEWD's calculation of 540,000 gallons for fire protection is inflated. Forest Hills further claims that JSEWD should not calculate any amount for fire protection storage because JSEWD includes a disclaimer regarding fire

⁵⁰ Case No 2005-00546, *Kentucky-American Water* (filed Dec. 22, 2005), Application, Exhibit 1 at 4-5.

⁵¹ *Id.*

protection in its tariff.⁵² In the April 30, 2013 Order in Case No. 2012-00470, the Commission specifically indicated that JSEWD's proposed one million-gallon elevated water storage tank might be needed based, in part, on services such as fire protection.⁵³

The disclaimer language in JSEWD's tariff is similar to disclaimer language in the tariffs of many water utilities. The water utility cannot guarantee water will be available when a fire occurs; however, water utilities calculate storage for fire protection assuming water will be available at the time a fire occurs.

Using the method established by Insurance Service Office, which Horne Engineering, Inc. states is the industry standard for calculating Needed Fire Flow,⁵⁴ Horne Engineering, Inc. calculated that 540,000 gallons of water would be necessary to extinguish a fire at a historic site on Keene-Troy Pike; that 540,000 gallons would be necessary to extinguish a fire at a stable on Harrodsburg Road; and that 540,000 gallons would be necessary to extinguish a fire at a church on Brannon Road.⁵⁵ Forest Hills avers 261,230 gallons is the amount that JSEWD should use for fire protection storage. Forest Hills does not indicate how it arrived at that figure and does not provide any industry standard that would support that figure. Further, Forest Hills does not indicate what would happen if a fire occurred at the historic site on Keene-Troy Pike, the stable on Harrodsburg Road, or the church on Brannon Road. JSEWD presented credible evidence that storage of 540,000 gallons of water is required for fire protection in the Northwest service area.

⁵² Forest Hills' Brief at 8.

⁵³ Case No 2012-00470, *Jessamine-South Elkhorn Water District* (Ky. PSC Apr. 30, 2013), Order at 11.

⁵⁴ Application, Exhibit A, Storage Analysis at 27.

⁵⁵ *Id.* at spreadsheet behind p. 28.

The storage analysis prepared by Horne Engineering, Inc. is credible evidence that the Northwest service area of JSEWD needs a storage capacity of 1,261,190 gallons of water based on the three components (equalization storage, emergency storage, and fire protection storage). The Northwest service area of JSEWD currently has 550,000 gallons of water storage capacity. The Northwest service area of JSEWD needs an additional 711,190 gallons to meet its present water storage needs based on generally recognized engineering principals considering equalization storage, emergency storage, and fire protection storage.

Horne Engineering, Inc. also projected JSEWD's minimum storage requirement through 2040 based on the storage requirements of 807 KAR 5:066, Section 4(4). This regulation requires the utility to have a minimum storage capacity equal to the average daily consumption. Equalization storage, emergency storage, and fire protection storage are not considered when determining if a utility is in compliance with 807 KAR 5:066, Section 4(4). Pursuant to the regulation, JSEWD had a water storage capacity shortage of 193,659 gallons (average daily demand of 743,659 gallons–550,000 gallons of water storage capacity) in 2010.

To determine the storage capacity that JSEWD will need in the future, Horne Engineering, Inc. looked at growth based on both future land use and the population projection prepared by Mr. Harper.⁵⁶ Horne Engineering, Inc. obtained information from

⁵⁶ *Id.*, Exhibit A, Storage Analysis at 32-33.

Jessamine County-City of Wilmore Joint Planning Commission and Joint Board of Adjustments regarding future land uses.⁵⁷ Using the information regarding future land use, Horne Engineering, Inc. calculated that JSEWD would need a storage capacity of approximately 2 million gallons by 2030.⁵⁸

Using Mr. Harper's population growth projection, if JSEWD does not increase its water storage capacity, Horne Engineering, Inc. calculates JSEWD will have a storage deficit of 436,293 gallons by 2020 and that storage deficit increases to 555,267 gallons by 2025.⁵⁹

Population Projection

In Case No 2012-00470, the Commission instructed JSEWD to "provide more convincing and reliable evidence on the customer growth and demand in the Northwest Service Area."⁶⁰ With its current application, JSEWD provided a population projection from 2015 to 2050 for the JSEWD Northwest service area ("2015-2050 Population Projections").⁶¹ Mr. Harper, while employed by Bluegrass Area Development District, prepared the 2015-2050 Population Projections. Using information from the 2010 census, the most recent census available, Mr. Harper calculated that 6,100 people resided within JSEWD's Northwest service area in 2010.⁶² By calculating JSEWD's

⁵⁷ *Id.* at 34.

⁵⁸ *Id.* at 35.

⁵⁹ *Id.*, Exhibit A, Storage Analysis at 32.

⁶⁰ Case No. 2012-00470, *Jessamine-South Elkhorn Water District* (Ky. PSC Apr. 30, 2013), Order at 12.

⁶¹ Application, Exhibit J, Mr. Harper's pre-filed Testimony, 2015-2050 Population Projections.

⁶² *Id.* at 5.

Northwest service area percentage of growth of the overall growth in Jessamine County, Mr. Harper determined that the population in JSEWD's Northwest service area would grow to 9,067 by 2025.⁶³

In Forest Hills' attempt to dispute the 2015-2050 Population Projections, Forest Hills reveals it is incorrectly interpreting the information provided. Forest Hills states that "census block group 6002 is entirely in [JSEWD's] service area."⁶⁴ Forest Hills may have been viewing the maps in black and white instead of viewing the maps in color. Two separate and distinct areas of census block group 6002 in 2010 are outside of JSEWD's Northwest service area.⁶⁵ JSEWD's Northwest service area does not extend to U.S. 27; however, one portion of census block group 6002 extends to U.S. 27. The other portion of census block group 6002 that is also outside of JSEWD's Northwest service area is a triangular area where KY 29 intersects with Jessamine Creek.⁶⁶

In its Brief, Forest Hills incorrectly interprets the information in the 2015-2050 Population Projections to indicate that 3,144 persons reside within JSEWD's Northwest service area in census block groups 1011 and 1013.⁶⁷ Again, Forest Hills reveals that it does not understand the information provided. The numbers presented in the lower left corner of the maps contained in the 2015-2050 Population Projections identify the *total*

⁶³ *Id.* at 6.

⁶⁴ Forest Hills' Brief at 12.

⁶⁵ Application, Exhibit A, Storage Analysis, Appendix A, map at 4. Census block group 6002 covered the same area in 2000 as in 2010. The map on page 3 (census year 2000) outlines the census block boundaries in red rather than the thick black lines on page 4 (census year 2010).

⁶⁶ *Id.* (Jessamine Creek is drawn on the map, but it is not identified.)

⁶⁷ Forest Hills' Brief at 13.

population in census block groups 1011 and 1013 as 3,144. The numbers are not limited to the population served by JSEWD in its Northwest service area.⁶⁸

Forest Hills also confuses census block groups with census blocks. According to Mr. Harper, only census blocks were used to calculate population totals.⁶⁹ Based on Forest Hills' Brief, Forest Hills does not accurately characterize the 2015-2050 Population Projections included with JSEWD's application. The Commission has discussed in this Order only a limited number of Forest Hills' inaccurate statements regarding the 2015-2050 Population Projections.

Based on the 1990, 2000, and 2010 census, the population in Jessamine County grew 27.97 percent from 1990 to 2000 and 24.45 percent from 2000 to 2010.⁷⁰

Mr. Harper provided the 1990, 2000, and 2010 census blocks for the Northwest service area of JSEWD along with the population in each census block.⁷¹ Mr. Harper indicated that in 1990, the Northwest service area of JSEWD consisted of 82 census blocks, but 17 of the 82 census blocks included areas both inside and outside of the JSEWD Northwest service area.⁷² The census blocks including areas both inside and outside of the JSEWD Northwest service area are identified by Mr. Harper on the sheets titled "[year] Block Split".⁷³

⁶⁸ JSEWD's Response to Post-Hearing Data Request (filed Mar. 11, 2015) ("JSEWD PHDR"), Item 1 at 4.

⁶⁹ *Id.* at 3.

⁷⁰ Application, Exhibit J, Mr. Harper's pre-filed Testimony, 2015-2050 Population Projections at 5, referencing US Census Bureau.

⁷¹ JSEWD PHDR (filed Mar. 11, 2015), Item 1.

⁷² *Id.* The Commission counted the number of census blocks listed to determine the numbers.

⁷³ *Id.*

To determine the population for JSEWD's Northwest service area in the split census blocks, JSEWD first determined the percentages of the total acreage that were inside and outside the JSEWD Northwest service area in each split block. For each split census block, Mr. Harper then used the same percentages from the acreage percentages to determine the population that resided inside and outside of the JSEWD Northwest service area.

As an example, in 1990, 54 people resided in Census Block 101B which comprised 823.65 acres. Only 73.26 acres (9 percent) of the 823.65 acres are inside the JSEWD Northwest service area. Using the acreage calculation of 9 percent as inside the JSEWD Northwest service area, of the 54 people residing in Census Block 101B, only five reside in the JSEWD Northwest service area. The acreage and population for the 17 split census blocks in 1990 are provided in the sheet titled 1990 Block Split.⁷⁴ If a YES appears next to the number, then that is the number of people residing within JSEWD's Northwest service area for that split census block.

To calculate the total population in the JSEWD Northwest service area in 1990, the numbers from the 17 split census blocks need to be substituted for the number that appears for that Census Block on the sheet marked "1990 Block Whole." For Census Block 101B on the sheet marked 1990 Block Whole, the number 54 should be changed to 5. After substituting the 17 split census block numbers on the 1990 Block Whole list, the population total in 1990 in the JSEWD Northwest service area is estimated to be

⁷⁴ *Id.*

3,490. This corresponds with the 1990 figure in the 2015-2050 Population Projections discussing historic growth trends.⁷⁵

Following the same procedure of substituting the split census block numbers from the sheet titled 2000 Block Splits to the sheet titled 2000 Block Whole, the estimated 2000 JSEWD Northwest service area population is 4,261 people. This is an increase of 771 people, or 22.09 percent growth, from 1990.⁷⁶ Again using the same procedure of substituting the split census block numbers from the sheet titled 2010 Block Split on the sheet titled 2010 Block Whole, the estimated 2010 JSEWD Northwest service area population is 6,100.⁷⁷ From 2000 to 2010, the JSEWD Northwest service area grew in population by 1,839, or 43.16 percent.

Mr. Harper compared the growth from 1990 to 2000 in the JSEWD Northwest service area (771) to the overall growth in Jessamine County (8,533) and determined that the JSEWD Northwest service area had 9.04 percent of the overall Jessamine County growth from 1990 to 2000.⁷⁸ He also compared the growth from 2000 to 2010 in the JSEWD Northwest service area (1,839) to the overall growth in Jessamine County (9,545) and determined that the JSEWD Northwest service area had 19.26 percent of the overall growth in Jessamine County from 2000 to 2010.⁷⁹

Mr. Harper decided to use JSEWD's Northwest service area percentage of growth as compared to the overall growth for Jessamine County for the 2000 to 2010

⁷⁵ Application, Exhibit J, Mr. Harper's pre-filed Testimony, 2015-2050 Population Projections at 5.

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.*

(19.26 percent) period when projecting population growth for JSEWD.⁸⁰ The use of 19.26 percent makes use of the most recent census data as requested by the Commission in Case No. 2012-00470.⁸¹ The Commission notes that the 2000 to 2010 base line period experienced both a housing boom and an economic downturn. Mr. Harper projects that JSEWD's Northwest service area 2010 population of 6,100 will grow to 9,067 by 2025.⁸²

Forest Hills confused percentages by using five-year intervals instead of ten-year intervals in its Brief. Forest Hills said that "Mr. Harper claims that [JSEWD] will experience growth of 32.63% from 2015 to 2020."⁸³ The 2015-2050 Population Projections do reflect 32.63 percent in the Growth column for JSEWD's Northwest service area.⁸⁴ The Growth column has ten-year intervals; therefore, 32.63 percent refers to the growth between 2010 and 2020 (not 2015-2020 as Forest Hills averred) for the JSEWD Northwest service area's 19.26 percent of the overall growth of Jessamine County during the same time period. Using 32.63 percent to calculate growth between 2010 and 2020 is reasonable considering the growth of the Northwest service area for 2000 to 2010 was 43.16 percent.⁸⁵

⁸⁰ *Id.* at 6.

⁸¹ Case No. 2012-00470, Jessamine-South Elkhorn Water District (Ky. PSC Apr. 30, 2013), Order at 11.

⁸² Application, Exhibit J, Mr. Harper's pre-filed Testimony, 2015-2050 Population Projections at 2 and 6.

⁸³ Forest Hills' Brief at 15.

⁸⁴ Application, Exhibit J, Mr. Harper's pre-filed Testimony, 2015-2050 Population Projections at 6.

⁸⁵ *Id.* at 5. The overall growth for Jessamine County from 2000 to 2010 was only 24.45 percent.

Computer Model Calibration

Horne Engineering, Inc. prepared a hydraulic analysis, which includes a 72-hour extended-period simulation, for JSEWD in February 2014.⁸⁶ The hydraulic analysis was performed using the KYPIPE model for JSEWD that was calibrated in October 2011.⁸⁷ Forest Hills avers that the approximate 28-month period between the calibration and analysis was too long, but has not pointed to any engineering source that definitively states that failure to recalibrate after 28 months renders the results inaccurate. Instead, Forest Hills cites to prior Commission Orders⁸⁸ that are not on point.

Forest Hills refers to Case No. 10189,⁸⁹ in which the Commission did find that the hydraulic analysis was based on a KYPIPE model that had not been properly calibrated. The Commission explained why it found the model was not properly calibrated indicating that during one hydraulic analysis “11 hydrant flow tests . . . were not simultaneous or within close proximity of each other.”⁹⁰ During a second hydraulic analysis, pressure readings for six of 13 points failed to be within 5 psi of the field

⁸⁶ Application, Exhibit I, Christopher Horne pre-filed Testimony, Hydraulic Analysis.

⁸⁷ JSEWD PHDR (filed Mar. 11, 2015), Item 6 at 11.

⁸⁸ Forest Hills references four Orders. In one of the Orders, an applicant is ordered to provide information. One of the requests for information indicates the importance of calibration. Another Order attaches a Staff Report. In the Staff Report, Commission Staff indicates the importance of calibration. Another Order attaches a report from the Commission’s engineering staff. None of these three Orders have any precedential value for the issues to be decided in this case.

⁸⁹ Case No. 10189, *The Application of Hardin County Water District No. 1, A Water District Organized Pursuant to Chapter 74 of the Kentucky Revised Statutes, in Hardin County, Kentucky, for (1) a Certificate of Public Convenience and Necessity Authorizing and Permitting Said Water District to Construct Water Storage and Distribution System Improvements, Consisting of Elevated Storage Tanks, and Water Transmission Lines (the Project); (2) Approval of the Proposed Plan of Financing of Said Project; and (3) Approval of Increased Water Rates Proposed to be Charged by the District to Its Retail and Wholesale Customers* (Ky. PSC May 15, 1989).

⁹⁰ *Id.* at 4.

data.⁹¹ Further deficiencies existed with the hydraulic analysis in Case No. 101089 and the Commission found that neither analysis supported the feasibility of the proposed construction.⁹² Forest Hills has not identified any deficiencies in the February 2014 hydraulic analysis prepared for JSEWD's Northwest service area.

Forest Hills also heavily relies on a potential interconnect project between the city of Nicholasville and JSEWD. Forest Hills infers that the Commission should deny JSEWD's application for a CPCN because JSEWD failed to provide "a hydraulic analysis that simulates whether an interconnect with the City of Nicholasville will be 'acceptable' or 'catastrophic'."⁹³ Forest Hills avers that the Commission looks "favorably upon water utilities obtaining additional sources of supply"⁹⁴ and cites to two cases. The first case cited by Forest Hills is Case No. 2004-00280⁹⁵ which involves an application made pursuant to KRS 278.023. As stated in the Final Order issued in that case on August 24, 2004, "KRS 278.023 does not grant the Commission any discretionary authority to modify or reject any portion of this agreement."⁹⁶ The Commission's Order in Case No. 2004-00280 cannot be considered as approval or disapproval of any portion of the proposed project.

⁹¹ *Id.* at 4 -5.

⁹² *Id.* at 7.

⁹³ Forest Hills' Brief at 19.

⁹⁴ Forest Hills' Brief 18-19.

⁹⁵ Case No. 2004-00280, *The Application of Fleming County Water Association, Inc. of Flemingsburg, KY for (1) A Certificate of Public Convenience and Necessity (2) Approval of the Proposed Plan of Financing Said Project* (Ky. PSC Aug. 24, 2004).

⁹⁶ *Id.* at 2.

The second case cited by Forest Hills also does not support Forest Hills' statement regarding additional sources of supply. As stated in the November 9, 2000 Order in Case No. 2000-00206, "[t]he record clearly indicates that an additional source of supply is necessary. NKWD, the area's sole water supplier, currently lacks capacity to meet the projected maximum daily demands of retail and wholesale customers."⁹⁷ Case No. 2000-00206 clearly does not stand for the proposition that the Commission believes water utilities should obtain additional sources of water supply.

In a letter dated October 2, 2014, Tom Calkins, Public Utilities Director with the city of Nicholasville, stated that "[a]lthough it is true that the City is investigating the possibility of providing a connection between the City's and [JSEWD's] water systems, there are **no final plans, financing or agreements to do so.**"⁹⁸ Christopher Horne testified that he performed a preliminary analysis digitally regarding the impact of the proposed interconnect project, but the preliminary analysis was never finalized because the interconnect project may never occur.⁹⁹ While the Commission makes no decision herein regarding a water utility having more than one source of water supply, it would be inappropriate and speculative to base our decision to grant or deny JSEWD's application for a CPCN in this case on an interconnect project that might possibly occur at some unknown time in the future, or might never occur.

⁹⁷ Case No. 2000-00206, *An Investigation of Boone County Water District's Decision to change Water Suppliers and of the Amendment of Water Supply Agreements Between Northern Kentucky Water Service District and Boone County Water District and the City of Florence, Kentucky* (Ky. PSC Nov. 9, 2000), Order at 13.

⁹⁸ JSEWD's Response to Forest Hills' Request for Information (filed Oct 15, 2014), Item 20. Emphasis added.

⁹⁹ VR 02/10/14 Hearing Transcript at 16:36:06–16:36:27.

Financing

As stated in our October 13, 2014 Order, the Commission will not consider the financing portion of JSEWD's application as filed until JSEWD files supplemental information regarding the terms of the financing.¹⁰⁰ The financing portion of JSEWD's application was never accepted for filing and, thus, the 60-day limit for the Commission to dispose of the financing application pursuant to KRS 278.300(2) has not begun to run. The Commission recognizes the unique circumstances faced by JSEWD in this case due to our finding in Case No. 2012-00470 that while additional water storage capacity was needed, the evidence at that time fell short of justifying the proposed one million-gallon water storage tank. Based on our decision herein to issue a CPCN for the construction of a 750,000-gallon water storage tank, JSEWD will now be able to complete its financing application and file it as a separate case for Commission review and consideration.

While most utilities apply for approval of financing at the same time that they seek authorization of a CPCN, there is no statutory requirement to simultaneously apply for both. Forest Hills incorrectly asserts that our April 19, 2013 Order in Case No. 2013-00043¹⁰¹ prevents issuance of a CPCN until the utility complies with KRS 424.260(1).¹⁰²

¹⁰⁰ Case No 2014-00084, *Jessamine-South Elkhorn Water District* (Ky. PSC Oct. 13, 2014), Order at 2-3.

¹⁰¹ Case No. 2013-00043, *Application of Muhlenberg County Water District for a Certificate of Public Convenience and Necessity to Construct and Finance a Water Improvements Project Pursuant to KRS 278.020 and 278.300* (Ky. PSC Apr. 19, 2013).

¹⁰² Except where a statute specifically fixes a larger sum as the minimum for a requirement of advertisement for bids, no city, county, or district, or board or commission of a city or county, or sheriff or county clerk, may make a contract, lease, or other agreement for materials, supplies except perishable meat, fish, and vegetables, equipment, or for contractual services other than professional, involving an expenditure of more than twenty thousand dollars (\$20,000) without first making newspaper advertisement for bids. KRS 424.260(1).

In Case No 2013-00043, the application for authorization to finance a project and for issuance of a CPCN to construct the project was accepted for filing on February 19, 2013.¹⁰³ The acceptance for filing purposes included both the financing request and the CPCN request. That the Commission issued the April 19, 2013 Order due to the expiration date of the 60-day limit for the Commission to dispose of the financing portion of the application imposed in KRS 278.300(2) is clearly evidenced by the last paragraph of the Order. The “application for authorization to enter a loan agreement with KRWFC is continued generally.”¹⁰⁴ The Order does not stand for the proposition that a regulated utility must obtain bids before the Commission may issue a CPCN.

Switzer Site passes the Wasteful Duplication Test

The Commission must determine if the construction of the 750,000-gallon elevated water storage tank on the Switzer site is “an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties.”¹⁰⁵ The Commission found in Case No. 2012-00470 that JSEWD was not in compliance with 807 KAR 5:066, Section 4(4), regarding water storage capacity.¹⁰⁶

Based on the average daily demand of 743,659 gallons and regulatory requirements, JSEWD needs an additional water storage capacity of 250,000 gallons as of 2010. However, JSEWD also presented evidence that supports the need for a 750,000-gallon tank now based on the storage analysis, including equalization storage,

¹⁰³ Case No. 2013-00043, *Muhlenberg County Water District* (Ky. PSC Apr. 19, 2013), Order at 1.

¹⁰⁴ *Id.* at 2.

¹⁰⁵ Kentucky Utilities 252 S.W.2d 885 at 890.

¹⁰⁶ Case No. 2012-00470, *Jessamine-South Elkhorn Water District* (Ky. PSC Apr. 30, 2013), Order at 10.

emergency storage, and fire protection storage.¹⁰⁷ Even if the equalization storage, emergency storage, and fire protection storage is not considered, based on population projections using the 2010 average daily demand of 743,659 gallons, JSEWD presents evidence supporting the need for an additional water storage capacity of 750,000 gallons in the Northwest service area within the next ten years.¹⁰⁸ Building one tank now, knowing that an additional tank will be needed within the next ten years, is inefficient and would result in a multiplicity of physical properties as additional storage tanks would need to be constructed within a ten-year timeframe.

The cost to build a 750,000-gallon tank now is estimated to be \$2 million and the cost to build a 500,000 gallon tank now is \$1,605,000.¹⁰⁹ The difference is \$395,000. For less than 25 percent more in funding, JSEWD will have 50 percent more water storage capacity.

Horne Engineering, Inc.'s calculation regarding present worth cost shows that building a 500,000-gallon elevated water storage tank now and a 250,000-gallon elevated water storage tank in 2023 would be an excessive investment in relation to productivity and efficiency.¹¹⁰ According to Horne Engineering, Inc., the present worth cost of building a 750,000-gallon elevated water storage tank now is \$1,782,579.¹¹¹ Horne Engineering, Inc. further calculated that present worth cost of building a 500,000-gallon elevated water storage tank now and a 250,000-gallon water storage tank in

¹⁰⁷ Application, Exhibit A, Storage Analysis at 31.

¹⁰⁸ *Id.* at 32.

¹⁰⁹ *Id.*, Exhibit H, John Horne Direct Testimony at 5.

¹¹⁰ *Id.*, Exhibit A, Storage Analysis at 36-39.

¹¹¹ *Id.* at 38.

2023 is \$2,078,704 or \$295,175 more than the present worth cost of building the 750,000 gallon elevated water storage tank now.¹¹² Based on Horne Engineering, Inc.'s calculations regarding the present worth cost, JSEWD will save \$295,175 by constructing the 750,000-gallon elevated water storage tank now rather than building a smaller tank now and another tank before 2025.

Location of Tank

During the hearing, Mr. Ritchie opined, and Forest Hills now suggests, that JSEWD could construct the new water storage tank where JSEWD's current 50,000-gallon elevated water storage tank is now located (known as the "Brown site") or alternatively co-locate the new tank with the 50,000-gallon elevated water storage tank. Forest Hills does not dispute that the Brown site is located next to the Harrods Ridge subdivision, which contains homes that have the same value as Forest Hills Estates subdivision. Forest Hills' witness, Mr. Davis, agrees that Harrods Ridge subdivision objects to the placement of a larger tank at the Brown site.¹¹³ A 750,000-gallon elevated water storage tank is 15 times larger than the 50,000-gallon elevated water storage tank currently located at the Brown site.

According to the JSEWD Water Tank Siting Study ("Siting Study") prepared by Photo Science on January 3, 2013, residents of 30 homes would be able to see a tank built at the Brown site.¹¹⁴ However, residents of only 16 homes would be able to view a

¹¹² *Id.* at 39.

¹¹³ VR 02/11/2015 Hearing Transcript at 11:53:35–11:53:45.

¹¹⁴ Mr. Ritchie's pre-filed Testimony (filed Oct. 29, 2014), Exhibit GMR-2 at 17.

tank built on the Switzer site.¹¹⁵ The Siting Study further indicates that 46 homes are within .5 miles of the Brown site, but only 26 homes are within .5 miles of the Switzer site.¹¹⁶

As already established herein, JSEWD needs additional water storage now to comply with PSC water storage regulations. Forest Hills presents no information how JSEWD could efficiently operate with only one storage tank, and less storage capacity, during the process of tearing down the 50,000-elevated water storage tank and construction of a new elevated water storage tank.

Locating a new elevated water storage tank next to or in place of the current 50,000-gallon elevated water storage tank is not a reasonable alternative. According to the evidence provided by Horne Engineering, Inc., using the Brown site instead of the Switzer site would require an additional 150 feet of piping, and would require an additional two vertical feet for each of the eight legs of the tank for the minimum height requirement necessary to maintain the high-water level of the tank at 1,171.68 feet.¹¹⁷ The Siting Study also indicates that the Brown site is two feet lower in elevation than the Switzer site.¹¹⁸ According to Horne Engineering, Inc., taking into consideration costs for various surveys, estimated cost to purchase land (if the owner agrees to sell), piping, and additional vertical feet, JSEWD would incur \$82,850 in costs that would not be

¹¹⁵ *Id.* Mr. Ritchie, on page 6 of his Rebuttal Testimony, updates this information to indicate that residents of one recently constructed home will be able to view a water tank at the Brown site and residents of four recently constructed homes will be able to view a water tank at the Switzer site.

¹¹⁶ *Id.*

¹¹⁷ JSEWD [Hearing] – Exhibit 3 at 30-33.

¹¹⁸ Mr. Ritchie's pre-filed Testimony (filed Oct. 29, 2014), Exhibit GMR-2 at 17.

incurred if the Switzer site is used.¹¹⁹ Furthermore, in JSEWD's answer in Case No. 2011-00138,¹²⁰ JSEWD presented evidence that clear title for the Brown site is not available, and even if title issues could be resolved, the tank footprint would extend outside the boundary of the site. JSEWD presented credible evidence that the Brown site is not a reasonable alternative.

JSEWD presented unrefuted evidence that seven owners of the 11 initial sites that JSEWD identified as potential locations for an elevated water storage tank were not interested in selling any property to the utility.¹²¹ According to JSEWD, initially, R.J. Corman, one of the four property owners willing to sell property to JSEWD, offered to donate a site for the location of a tank, but later withdrew the offer.¹²² JSEWD avers that after approaching the remaining property owners, Sue Switzer agreed to sell one acre to JSEWD and a deed was executed on May 10, 2004.¹²³

JSEWD presented evidence that after it notified Forest Hills Development, LLC in writing on November 11, 2005, of JSEWD's intention to build a tank on the property it owned, the developer initially proposed to donate another site, but the developer never followed through with his proposal.¹²⁴ JSEWD also investigated three additional sites proposed by residents of Forest Hills Estates subdivision prior to Forest Hills' filing a complaint with the Commission against JSEWD.

¹¹⁹ JSEWD [Hearing] – Exhibit 3 at 35.

¹²⁰ Case No. 2011-00138, *Forest Hills Residents Association, Inc. and William Bates vs Jessamine South Elkhorn Water District* (filed May 23, 2011), Exhibit H.

¹²¹ John Horne Rebuttal Testimony (filed Jan. 14, 2015) at 3.

¹²² Nicholas Strong Rebuttal Testimony (filed Jan. 14, 2015), Exhibit A at 2.

¹²³ *Id.* at 2-3.

¹²⁴ *Id.* at 4.

According to JSEWD, during the pendency of Case No 2012-00470, JSEWD investigated seven additional sites proposed by Photo Science. JSEWD presented evidence that by using Photo Science's selection process, the Switzer site is the best site.¹²⁵ Based on the credible evidence JSEWD presented, it has considered at least 20 alternative locations, balanced all relevant factors, and performed an adequate and reasonable site selection process.

Forest Hills avers that JSEWD should use eminent domain to force an unwilling seller to sell property for the purpose of locating the elevated water storage tank in a location somewhere other than next to the Forest Hills Estates subdivision. As already indicated, Forest Hills advocates placing the tank in the Harrods Ridge subdivision knowing that eminent domain might be necessary to purchase the property.

Forest Hills' own witness, Mr. Davis, admitted knowing at the time of his purchase that JSEWD had an easement in the Forest Hills Estates' subdivision and that he looked at the plat.¹²⁶ In response to a post hearing data request, Forest Hills provided a copy of the plat that Mr. Logan reviewed. The plat clearly shows an easement in favor of JSEWD within Forest Hills Estates subdivision *and* "Lot 1B Sue Switzer Amended Minor Subdivision Plat Dated May 2004 for the Jessamine South Elkhorn Water District."¹²⁷

¹²⁵ JSEWD [Hearing] – Exhibit 3 at 34-35; and John Horne Rebuttal Testimony (filed Jan. 14, 2015) at 4.

¹²⁶ VR 02/11/2015 Hearing Transcript at 11:45:24–11:47:17

¹²⁷ Forest Hills' Post-Hearing Date Request (filed Mar. 11, 2015) , Item 1.

In its Brief, Forest Hills states that the “recorded plat did not mention the proposed project.”¹²⁸ The Commission notes that the plat also does not say homes or residences will be built. As already stated, JSEWD operates a sewer collection facility and water distribution systems. One can reasonably assume that a one-acre lot owned by a sewer or water utility will be used for either sewer or water facilities.

JSEWD has presented irrefutable evidence that it properly recorded its deed prior to the development of the Forest Hills Estates subdivision. Any purchaser of a lot within Forest Hills Estates subdivision was on notice of JSEWD’s ownership of the one-acre lot known as the Switzer site.

Forest Hills attempts to persuade this Commission that the tank should not be built on property JSEWD purchased prior to the development of the Forest Hills Estates subdivision by citing to a 1957 New Jersey case.¹²⁹ The 1957 New Jersey case is not on point. The evidence in the New Jersey case indicates that the property was not initially purchased for the purpose of installing a water tank, but that a decision was made to locate a water storage tank on the property *after* the area surrounding the property became residential.¹³⁰ The appellate court stated “[a]pparently the fact that Ridgewood owned the Van Emburgh site was what caused the village commissioners to decide to locate the tank on that tract.”¹³¹

¹²⁸ Forest Hills’ Brief at 30.

¹²⁹ Forest Hills’ Brief at 34.

¹³⁰ *Washington Tp., Bergen County v. Village of Ridgewood*, 134 A.2d 345, 346 (N.J. Super 1957).

¹³¹ *Id.* at 348.

In the present case, JSEWD presented evidence that its sole purpose in purchasing the Switzer site was to locate a water storage tank on the property. Forest Hills presented no evidence to dispute JSEWD's intention of placing a water storage tank on the Switzer property at the time of purchase in 2004 prior to the development of Forest Hills Estates subdivision.

Forest Hills implies that any elevated water storage tank is likely to collapse because an elevated storage stand pipe¹³² owned by U.S. 60 Water District collapsed on August 9, 2014.¹³³ The Commission opened a formal investigation to determine if U.S. 60 Water District complied with regulations requiring water utilities to annually inspect water storage facilities, to operate facilities in a manner to provide adequate and safe service, and to timely report the collapse of the stand pipe.¹³⁴

According to JSEWD, J&J Pressure Washing and Tank Services annually inspects the utility's stand pipe and elevated storage tanks.¹³⁵ Forest Hills has presented no evidence to refute that JSEWD annually inspects its water storage facilities. Furthermore, Forest Hills has not presented any evidence that JSEWD operates its facilities in a manner other than by providing adequate and safe service.

¹³² Forest Hills incorrectly refers to the stand pipe as a storage tank.

¹³³ Case No. 2015-00037, *U.S. 60 Water District Alleged Failure to Comply with 807 KAR 5:006, Sections 26 and 27, and 807 KAR 5:006, Section 7* (Ky. PSC Apr. 2, 2015).

¹³⁴ *Id.*

¹³⁵ JSEWD's Response to Commission Staff's Request for Information (filed Oct. 10, 2014), Item 3.

According to Horne Engineering, Inc., maintenance may require that a tank be taken off line, further illustrating the need for an additional storage tank.¹³⁶

Property Evaluation and Residential Concerns

Forest Hills offers numerous arguments against the proposed 750,000-gallon elevated water storage tank, but its main objection is that JSEWD proposes to construct the elevated water storage tank on the one-acre Switzer site next to the Forest Hills Estates subdivision. Mr. Toleman testified that homes in Forest Hills Estates would lose, on average, 20 percent of their value if an elevated water storage tank were constructed on the Switzer site.¹³⁷ Despite repeated discovery requests, including a discovery request made during the hearing, Mr. Toleman never presented credible evidence to support his determination that homes in Forest Hills Estates would lose 20 percent of their value if JSEWD constructed an elevated water storage tank on the Switzer site. However, even assuming that construction of the elevated water storage tank *may* have an effect on the value of the homes in Forest Hills Estates, a determination of the effect on the value of homes is outside the purview of the Commission's jurisdiction.¹³⁸ The issues in a CPCN case of this type are limited to whether there is a need and wasteful duplication.

Forest Hills avers that the Intervenors have been treated unreasonably, claiming that JSEWD unfairly shifted to the Intervenors the responsibility of finding an alternative site for a tank. JSEWD took the responsibility for locating the initial site, acquiring the

¹³⁶ Application, Exhibit A, Storage Analysis at 9.

¹³⁷ Direct Testimony of E. Clark Toleman (filed Oct 29, 2014) at 7.

¹³⁸ Case No. 2006-00463, *Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity for the Construction of a 345 KV Electric Transmission Project in Clark, Madison, and Garrard Counties, Kentucky* (Ky. PSC Sept. 9, 2007), Order at 8.

site, and securing funding for the project. Prior to selection and purchase of the Switzer site in 2004, JSEWD had identified and considered ten other sites.¹³⁹

In 2010, nearly six years after JSEWD purchased the Switzer site, residents of Forest Hills Estates subdivision expressed opposition to locating a water storage tank at the Switzer site.¹⁴⁰ JSEWD had already performed its duty to select a site, acquire a site, and provide funding for the construction. However, JSEWD gave the residents of Forest Hills Estates subdivision the opportunity to locate another site for the tank with the stipulation “that the added expense in securing another site would have to be reimbursed by them and not borne by [JSEWD’s] customers.”¹⁴¹ Giving the residents an opportunity to locate another site is not shifting responsibility. JSEWD had already performed its responsibilities.

FINDINGS

Having reviewed the application and being otherwise sufficiently advised, the Commission finds that:

1. Horne Engineering, Inc. prepared the plans and specifications for the proposed project.
2. The Kentucky Division of Water approved the plans and specifications for the proposed project.¹⁴²
3. The proposed construction of a 750,000-gallon elevated water storage tank will not result in wasteful duplication of existing facilities.

¹³⁹ John Horne Rebuttal Testimony (filed Jan. 14, 2015) at 3.

¹⁴⁰ L. Nicholas Strong Rebuttal Testimony, Exhibit A at 5-6.

¹⁴¹ *Id.* at 6. Emphasis in original.

¹⁴² July 17, 2014 Letter from Mark Rasche, P.E., Supervisor, Engineering Section, Division of Water, to Glenn Smith, JSEWD (filed Aug. 11, 2014).

4. The proposed construction of a 750,000-gallon elevated water storage tank does not conflict with any existing certificates or the service of any other utility operating in the area.

5. Public convenience and necessity require the proposed construction of the 750,000-gallon elevated water storage tank to comply with regulations and meet JSEWD's water storage needs based on equalization storage, emergency storage, and fire protection storage.

6. JSEWD's current application to approve financing of the 750,000-gallon elevated water storage tank should be dismissed, without prejudice, for failure to timely provide the terms of financing.

7. JSEWD should be granted the CPCN to proceed with the proposed construction of the 750,000-gallon water storage tank as set forth in its application.

8. Within 120 days of the date of this Order, JSEWD should file an application for approval of its financing arrangement for the proposed construction and to enter into the evidences of indebtedness.

IT IS THEREFORE ORDERED that:

1. JSEWD's current application for approval of financing is dismissed, without prejudice.

2. JSEWD is granted a CPCN to proceed with the proposed construction of the 750,000-gallon elevated water storage tank as set forth in its Application.

3. JSEWD shall notify the Commission prior to performing any additional construction not expressly authorized by this Order.

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

5. JSEWD shall notify the Commission in writing one week prior to the actual start of construction and at the 50 percent completion point.

6. JSEWD shall file with the Commission documentation of the total costs of this project, including the cost of construction and all other capitalized costs, (e.g., engineering, legal, administrative) within 60 days of the date that 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.

7. JSEWD shall file a copy of the "as-built" drawings and a certified statement that 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.

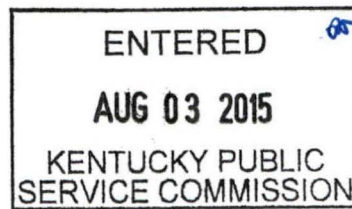
8. JSEWD shall require construction to be inspected under the general supervision of a licensed professional engineer with a Kentucky registration in civil or mechanical engineering to ensure that the construction work is done in accordance with the contract drawings and specifications and in conformance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

9. Any documents filed in the future pursuant to ordering paragraphs 5, 6, and 7 shall reference this case number and shall be retained in the utility's general correspondence file.

10. Within 120 days of the date of this Order, JSEWD shall file an application for approval of its financing arrangement for the proposed construction and to enter into any evidences of indebtedness.

11. The Executive Director is delegated authority to grant reasonable extensions of time for the filing of any documents required by this Order upon JSEWD's showing of good cause for such extension.

By the Commission



ATTEST:


Executive Director

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