#### Witness: Brent E. O'Neill

- 1. Refer to the application, paragraph 8, page 4. The Hazen and Sawyer Specifications and Contract Documents (Exhibit D) and the Hazen and Sawyer Project Drawings (Exhibit E) are, at this time, considered to be at the 60 percent level of detail.
  - a. When does Kentucky-American anticipate having these documents at 100 percent level of detail?
  - b. Describe what the remaining 40 percent of both documents would comprise.

#### **Response:**

- a. The current schedule is for a review of the 90% documents in September 2014 with completion of the 100% documents by the end of October 2014.
- b. The remaining amount of work for both the drawings and specifications is the development of project specific details. A majority of the process design and building design is complete as represented in the current documents. Electrical and Instrument/Control information will also be further developed.

During this final 40% development, input regarding constructability and project saving ideas presented by W. Rogers Company will be considered.

#### Witness: Brent E. O'Neill

2. Provide a discussion of any impending risks or hazards to Kentucky-American staff at the Richmond Road Station ("RRS") filter building and how those risks are currently mitigated.

#### **Response:**

With the addition of the remedial measures that have stabilized the structure for a short period of time, the impending risk and hazards that are related to ongoing operation of the Richmond Road Station (RRS) filter building for the Kentucky-American staff are as follows:

- Continued spalling of concrete beams which presents a falling object hazard for individuals working in the gallery.
- Rust and corrosion on many surfaces is a hazard due to the close proximity KAW employees' hands, arms and body to these surfaces which could lead to cuts or scrapes on the rusted material.
- Ingress and egress is difficult depending on the location of the work being performed within the gallery and is a hazard to staff if the need to exit quickly is required or the need to rescue any injured employees arises.
- The piping gallery is congested and presents a severe challenge for the maintenance and repair of equipment within the gallery.

At the present time, anyone entering the pipe gallery must wear a hard hat and safety glasses. Signs at each of the ingress and egress points have been placed to indicate the need for protective gear. In addition, during numerous maintenance operations a two member team will be required to perform the operation while the work could be performed by a single individual in a less hazardous or congested space due to the reduced mobility within the pipe gallery and the need to assist if an injury occurs.

#### Witness: Brent E. O'Neill

3. State whether the application includes a request for the approval of the design and construction of a new clear well.

#### **Response:**

KAW is not requesting an approval for the design and construction of a new clearwell. A part of the current application is the construction of a 280,000 gallon CT Contactor. The CT Contactor replaces the inactivation credits for viruses and Giardia cysts that were partially provided by the clearwell located beneath the existing filter building. Through the construction of the CT Contactor, the Richmond Road Station Facility will be able to achieve a minimum of 4-log inactivation of viruses and 3-log inactivation of Giardia cysts through the physical particle removal treatment processes and disinfection. The facility does lose 320,000 gallons of operational storage through the elimination of the existing clearwell under the filter building. This reduction of available on site storage results in loss of 19 minutes in the operational buffer between producing the water through treatment process and pumping it to the distribution system under the maximum flow rate of 25 MGD. KAW does not believe the loss of this buffer will impact the ability to operate the facility safely, reliably, and with high quality water output.

We anticipate that during a future upgrade to the Richmond Road Station high service pumps, the available clearwell volume will be reviewed and adjusted at that point if necessary. It is anticipated that the high service pump efficiency project will occur within the next 5 to 10 years.

#### Witness: Brent E. O'Neill

4. Provide all inspection reports that Kentucky-American has directly or indirectly prepared for the RRS filter building since January 1, 2008, that review or discuss the structural condition to the filter building. Omit the September 2013 HDR Engineering, Inc. ("HDR") report submitted with Kentucky-American's application.

#### **Response:**

Please refer to the attached.

#### Witness: Brent E. O'Neill

5. Provide all correspondence, memoranda, electronic mail messages, and any other documents since January 1, 2008, in which Kentucky-American or its agents discuss the structural condition of the RRS filter building and possible repairs to the filter building.

#### **Response:**

Please see the attached correspondence and electronic mail messages. Kentucky American Water will continue to review archived documents and will provide any additional relevant documents as a supplemental to this request.

#### Witness: Brent E. O'Neill

6. Describe the routine maintenance protocol and schedule for the RRS filter building for the period from January 1, 2008, to October 1, 2013.

#### **Response:**

The reference to routine maintenance was to ongoing maintenance of equipment and repairs that occurred at the filter building during this period. The protocol and schedules were then and are now driven by needed repairs and preventative maintenance of the equipment located within the filter gallery. Due to the lack of space available, proactive maintenance measures or extensive reconditioning have been difficult to conduct within the gallery. Specifically, extensive reconditioning would require the entire gallery be cleaned out of equipment, and even after the reconditioning the space problem would remain. In order to accomplish reconditioning, the filter building and Richmond Road Station Facility would have to be shut down for extended periods which were not possible until the completion of Kentucky River Station 2 in 2010.

#### -

#### Witness: Brent E. O'Neill

- 7. Refer to the Direct Testimony of Brent E. O'Neill at page 3. Mr. O'Neill states that "[d]uring a regular review of the facilities, concerns were raised of the severe continued deterioration of the concrete support beams of the operating floor located above the pipe gallery."
  - a. Describe the "regular review" process for the RRS filter building for the period from January 1, 2008, to October 1, 2013.
  - b. State the date of the regular review referenced in Mr. O'Neill's testimony.
  - c. State the dates of the regular reviews of the RRS filter building for the period from January 1, 2008, to October 1, 2013.
  - d. For each regular review conducted since January 1, 2008, state whether Kentucky-American prepared a report documenting the review. For each report prepared, provide a copy of the report.

#### **Response:**

- a. The regular review process is typically conducted on a 5-year time period that occurs with Kentucky American Water staff and American Water Works Service Company Corporate Engineering staff as part of comprehensive planning efforts. This review is a comprehensive review of the operations and facilities to identify areas of improvements that assist with the development of the capital budget.
- b. August 23-24, 2012.
- c. The review process of 2012 was the only regular review process performed during the period from January 1, 2008 to October 1, 2013.
- d. The report of the August 2012 inspection is included in the response to question 4. See the Preliminary Structural and Mechanical Evaluation for the Kentucky American Water Richmond Road Station Filter Building prepared by American Water Works Service Company Corporate Engineering dated December 2012.

#### COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

#### Witness: Brent E. O'Neill

- 8. Refer to the Direct Testimony of Brent E. O'Neill at page 4. Mr. O'Neill states that "remedial measures were installed to provide temporary support of the operating floor during June 2013 to avoid a likely failure in the building."
  - a. Describe the remedial measures that were installed.
  - b. Provide a schedule listing the cost Kentucky-American incurred in installing the remedial measures.
  - c. State whether Kentucky-American had considered the installation of remedial measures to provide temporary support of the RRS filter building operating floor prior to the regular review of facilities referenced in Mr. O'Neill's testimony.
  - d. Provide the reasons why Kentucky-American allowed the deterioration of the RRS Filter Building to persist.

#### **Response:**

- a. During June 2013, KAW installed 17 floor-mounted pipe supports and cross members to temporarily enhance existing pipe supports for 30-inch and 36-inch diameter cast iron raw water pipe, and to support severely corroded floor slab beams. These measures were considered temporary and are only expected to remain in service over the next 3 to 5 years. This work did not address cracks and leakage from the filter boxes to the gallery floor, nor did it address exposed rebar associated with the beams and floor slab. This work has further restricted movement in piping gallery as a result of the installation of additional columns and cross members.
- b. The cost associated with the installation of the remedial measures was as follows:

Contracted Services	\$ 51,400.00
AFUDC	\$ 747.19
Overhead	\$ 2,210.20
Total	\$ 54,357.39

- c. KAW had not considered the installation of remedial measures prior to regular review since the level of deterioration was not fully identified until the August 23, 2012 inspection.
- d. KAW was aware of the concrete spalling and corrosion of the rebar and had monitored the conditions visually leading up to the regular review. Provisions to reduce the impact of the corrosion of were carried out over the past 10 years

through the establishments of powered clearwell vents and installation of other venting to attempt to control the effects of chlorine vapor and water vapor within the gallery. The access inside the gallery is so difficult that the focus of maintenance personnel has generally been to ingress, address the maintenance, and egress without injuring themselves on the pipe or equipment while navigating the gallery. Prior to the structural inspection, the concrete spalling and rebar corrosion was considered superficial and more of a nuisance and not a reflection of the structural integrity of the building.

#### KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2014-00258

#### COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

#### Witness: Brent E. O'Neill

- 9. At pages 4 and 5 of his direct testimony, Mr. O'Neill refers to Kentucky-American's request for proposals to evaluate the RRS filter building, to the five proposals Kentucky-American received, and to the selection of HDR to conduct the evaluation.
  - a. Provide a copy of the request for proposal that Kentucky-American issued to solicit proposals to evaluate the RRS filter building.
  - b. Provide copies of the five proposals Kentucky-American received.
  - c. Provide a list of all Kentucky-American and American Water Works Company ("American Water") employees who participated in the evaluation and selection process. For each employee listed, provide the employee's:
    - (1) Name;
    - (2) Title;
    - (3) Length of employment; and
    - (4) Job duties.
  - d. Provide all correspondence, electronic mail, analyses, notes, memoranda, studies, and related documents that were prepared as part of the evaluation process.
  - e. Provide a detailed analysis, with the pros and cons of each of the five proposals that were submitted. Include in the analysis the reasons why the proposal from HDR was selected.

#### **Response:**

- a. Please refer to the attached at pages 1 6.
- b. Please see the attached at pages 7 150.
- c. The KAW employees who participated in the evaluation and selection process were:

Zachery Dukes
Project Manager Engineer
2 years with Kentucky American Water
Project manager for Richmond Road Station Filter Building

#### KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2014-00258

#### COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

Brent O'Neill

Director of Engineering

18 years with American Water

Coordination of the Engineering Departments for both Kentucky American Water and Tennessee American Water, which includes the planning, development, and implementation of all aspects of construction projects.

Ronald (Kevin) Kruchinski

**Superintendent Operations** 

8 years with Kentucky American Water

Manages the operations and maintenance of the production facilities for Kentucky American Water including the Richmond Road Station Facility

#### **David Shehee**

Superintend Water Quality and Environmental Compliance

15 years with Kentucky American Water

Manages and monitors regulatory compliance of the facilities and coordinates with the production group to manage water quality and production of water

- d. Please refer to the attached at pages 151 163.
- e. KAW selected the most qualified proposal based on the following criteria:

•	Project Approach	30%
•	Project Schedule	20%
•	Fee Proposal	10%
•	Project Team	20%
•	Firm's Capabilities	20%

Please refer to the attached at pages 164 - 169.

#### Witness: Brent E. O'Neill

- 10. Refer to Mr. O'Neill's direct testimony at page 7 and to the application, Exhibit B, Richmond Road Station Water Treatment Plant Filter Building Evaluation ("HDR Evaluation Report"), Section 2 Available Options.
  - a. Provide a schedule that compares the annual operational costs of each of the 13 options evaluated. Include workpapers, calculations, and assumptions used to develop the annual operational cost estimates.
  - b. Provide a list of all Kentucky-American and American Water employees who participated in the development of the HDR Evaluation Report. For each employee listed, provide the employee's:
    - (1) Name;
    - (2) Title;
    - (3) Length of employment; and
    - (4) Job duties.
  - c. Provide the minutes of each "Vetting" workshop that was held between employees of Kentucky-American and HDR.
  - d. Provide all correspondence, electronic mail, analyses, notes, memoranda, studies, and related documents that were prepared as part of the evaluation of the 13 options.

#### **Response:**

a. As shown in figure 2-2 of the HDR RRS Filter Building report in Exhibit B, the vetting process included reviewing five factors for each concept. These factors included whether a concept could feasibly be completed, could meet treatment goals, the risk of potential problems with a concept that may arise that may cause treatment disruptions along with the security that an approach could meet current and future regulations, the cost effectiveness of each option, and the immediate need of the process employed by the concept. Each concept was vetted using these five factors and allowed the 13 concepts to be reduced to 3 viable choices. Annual operating costs were not used during this vetting process since the concepts were not developed fully enough to understand all of the operating costs.

#### KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2014-00258

#### COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

b. The KAW employees who participated in the evaluation and selection process were:

**Zachery Dukes** 

Project Manager Engineer

2 years with Kentucky American Water

Project manager for Richmond Road Station Filter Building

Brent O'Neill

Director of Engineering

18 years with American Water

Coordination of the Engineering Departments for both Kentucky American Water and Tennessee American Water, which includes the planning, development, and implementation of all aspects of construction projects.

Ronald (Kevin) Kruchinski

**Superintendent Operations** 

8 years with Kentucky American Water

Manages the operations and maintenance of the production facilities for Kentucky American Water including the Richmond Road Station Facility

#### **David Shehee**

Superintend Water Quality and Environmental Compliance

15 years with Kentucky American Water

Manages and monitors regulatory compliance of the facilities and coordinates with the production group to manage water quality and production of water.

Justin Sensabaugh

**Operations Supervisor** 

6 years with Kentucky American Water

Manages the operations and maintenance of the Richmond Road Station Water Treatment Facility

Keith Cartier

**Vice President Operations** 

9 years with American Water

Manages the operations of the production and network facilities for Kentucky American Water

- c. Please the attachment to this data request at pages 1 5.
- d. Please see the attachment at pages 6 115.

#### Witness: Brent E. O'Neill

- 11. At page 10 of his direct testimony, Mr. O'Neill states that it is likely that the Kentucky Division of Water ("DOW") would consider Membrane Filtration and Ozone Enhanced Biological Filtration to be new technologies or newer un-tested processes that may need a one-year pilot test.
  - a. Identify any water treatment facilitates operating in Kentucky that use either Membrane Filtration or Ozone Enhanced Biological Filtration.
  - b. State whether Kentucky-American has contacted DOW to inquire about the DOW's requirements for Membrane Filtration or Ozone Enhanced Biological Filtration.

#### **Response:**

- a. Kentucky American Water and HDR are aware of the following water treatment facilities that have installed membrane filtration in Kentucky: Jamestown, Somerset, Logan-Todd Regional Water Commission and Hardinsburg. Louisville Water Company considered Ozone Biofiltration but ultimately decided to use riverbank filtration. We are not aware of any other facility that uses Ozone Enhanced Biological Filtration.
- b. Kentucky American Water did not contact Kentucky Department of Water in specific relation to this project. The Company relied on previous knowledge of KDOW permitting requirements with regard to new technology as well as the Company's knowledge of the requirements discussed in 401 KAR 8:100 Design, construction and approval of facilities. In addition, HDR was aware of the approved membrane plants mentioned above and was also aware of the KDOW requirements for piloting and installation.

HDR has indicated that they have had discussions with KDOW Drinking Water Technical Assistance for several years about biofiltration and are aware of their requirements. The addition of ozone in front of the biofilter has been proven to enhance the removal efficiency is a significant manner. The cost of using ozone has always been the challenge. In Kentucky, use of ozone is not practiced as part of biofiltration due to that cost. HDR looked at that option during their review of the filter building to confirm the cost of using ozone and to ascertain whether the cost could be managed effectively. The Company did not approach KDOW regarding this issue.

#### KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2014-00258

### COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

#### Witness: Brent E. O'Neill

- 12. At pages 10 and 11 of his direct testimony, Mr. O'Neill explains that based upon the HDR recommendation, Kentucky-American decided to proceed with the development of a design and construction drawings and sent a request for proposal to three engineering consultants.
  - a. Explain why Kentucky-American limited its request for proposal to three engineering consultants.
  - b. Identify the three engineering consultants and describe the criteria Kentucky-American used in its selection of the three consultants.
  - c. Provide copies of the three proposals received from the engineering consultants.
  - d. Provide all correspondence, electronic mail, analyses, notes, memoranda, studies, and related documents that were prepared as part of the evaluation of the three proposals received.

#### **Response:**

- a. Kentucky American Water reviewed the five engineering consultants that provided proposals for the Richmond Road Station Evaluation Report and selected the three engineering firms that had worked on similar sized projects for Kentucky American Water or other American Water locations. Kentucky American believed that only firms that provided proposals on the original evaluations could efficiently propose on design on the facilities. By limiting it to three proposals, Kentucky American felt that it would still get a competitive price with the three firms best suited to the project.
- b. Kentucky American Water selected Hazen and Sawyer, HDR and Gannett Fleming as the three engineering consultants to request proposal for the development of the design. Kentucky-American selected the three possible bidders based on:
  - i. Previous work performed with Kentucky American Water
  - ii. Familiarity of the consultants to the Kentucky American Water Staff
  - iii. Familiarity with the American Water process and level of engagement by Kentucky American Water Staff
  - iv. Familiarity with Design-Build or Alternative Delivery Methods
  - v. Success with previous work conducted for Kentucky American Water or other American Water states.
  - vi. Access to local personnel

Hazen and Sawyer was selected based on successful projects performed for both Illinois American Water and Indiana American Water. Gannett Fleming was selected based on previous work performed for Kentucky American Water such as Kentucky River Station No. 2 along with other work performed for other American Water locations. HDR was selected based on previous work performed for Kentucky American Water and knowledge gained by the completion of the Evaluation Report.

- c. Please see the attached at pages 1 through 236.
- d. The company selected the most qualified proposal based on the following criteria

•	Project Approach	30%
•	Project Schedule	20%
•	Fee Proposal	10%
•	Project Team	20%
•	Firm's Capabilities	20%

Please see the attached at pages 237 through 283.

### KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2014-00258

#### COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

Witness: Brent E. O'Neill

- 13. At page 13 of his direct testimony, Mr. O'Neill states that "[t]he facility has been primarily designed by Hazen and Sawyer, with significant input throughout the process by KAW and AWW [American Water]."
  - a. Provide a list of all Kentucky-American and American Water employees who participated in the design of the RRS filter building. For each employee listed, provide the employee's:
    - (1) Name;
    - (2) Title;
    - (3) Length of employment; and
    - (4) Job duties.
  - b. Provide all correspondence, electronic mail, analyses, notes, memoranda, studies, and related documents that were prepared as part of Kentucky-American and American Water employees' involvement in the design of the RRS filter building.

#### **Response:**

a. The list of employees that participated in the design of the filter building are as follows:

**Zachery Dukes** 

Project Manager Engineer

2 years with Kentucky American Water

Project manager for Richmond Road Station Filter Building

Brent O'Neill

Director of Engineering

18 years with American Water

Coordination of the Engineering Departments for both Kentucky American Water and Tennessee American Water, which includes the planning, development, and implementation of all aspects of construction projects

Ronald (Kevin) Kruchinski

**Superintendent Operations** 

8 years with Kentucky American Water

Manages the operations and maintenance of the production facilities for Kentucky American Water including the Richmond Road Station Facility

#### KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2014-00258

#### COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

David Shehee

Superintend Water Quality and Environmental Compliance

15 years with Kentucky American Water

Manages and monitors regulatory compliance of the facilities and coordinates with the production group to manage water quality and production of water

Justin Sensabaugh

**Operations Supervisor** 

6 years with Kentucky American Water

Manages the operations and maintenance of the Richmond Road Station Water Treatment Facility

Michael Maggard

Senior Specialist Maintenance Service

9 years with Kentucky American Water

Development and maintenance of the KAW controls and instrument systems with the production facilities

Keith Cartier

**Vice President Operations** 

9 years with American Water

Manages the operations of the production and network facilities for Kentucky American Water

b. Please see the attachment.

#### Witness: Brent E. O'Neill

14. At page 13 of his direct testimony, Mr. O'Neill describes meetings between DOW and Kentucky-American concerning DOW's approval of the RRS filter building project. Provide all correspondence, electronic mail, analyses, notes, memoranda, studies, minutes of meeting, and related documents that were prepared as part of Kentucky-American's meetings with DOW.

#### **Response:**

Please see attached.

#### Control of the contro

#### Witness: Brent E. O'Neill

- 15. At page 18 of his direct testimony, Mr. O'Neill explains that Kentucky-American sent a request for proposal to three pre-qualified contractors to build the RRS filter building.
  - a. Explain the term "pre-qualified contractors" and describe the process a contractor must follow to become pre-qualified.
  - b. Explain why Kentucky-American limited its request for proposal to three prequalified contractors.
  - c. Identify the three pre-qualified contractors and describe the criteria Kentucky-American used in its selection of the three contractors.
  - d. Provide copies of the three proposals received from the pre-qualified contractors.
  - e. Provide all correspondence, electronic mail, analyses, notes, memoranda, studies and related documents that were prepared as part of the evaluation of the three pre-qualified contractors.

#### **Response:**

- a. The term "pre-qualified contractors" are contractors that have previously worked with Kentucky American Water or other American Water locations and have been successful in similar scope projects for American Water. Kentucky American considers contractors based on similar scale projects, review of references, review of safety performance, area of operation, familiarity with construction of water treatment facilities, and project site visits. In addition, if another American Water location has a successful project with a new contractor, then that information is provided to other states for future consideration for other projects.
- b. Kentucky American selected the three contractors that were invited to bid on the RRS Filter Building project based on previous experiences with each contractor including successful completion of projects with Kentucky American and other American Water locations. Kentucky American water felt that the proposed schedule for the project, ability to work with the Kentucky American staff, and an understanding of the PSC process were important for the success of the proposed project. Each of the selected contractors has successfully worked previously with Kentucky American.
- c. Kentucky American invited Bowen Engineering, Layne and W. Rogers Company to provide proposals on the RRS Filter Building Project. As indicated, each of these contractors has worked successfully with Kentucky American and other American Water locations. In addition, each contractor has shown the ability to

work with Kentucky American staff and has experience with other similar projects for American Water and other locations within Kentucky and surrounding states.

- d. Please refer to the attachment at pages 1 221.
- e. The Company selected the most qualified proposal based on the following criteria

•	Commercial	35%
•	Technical	15%
•	Schedule	20%
•	Qualifications	10%
•	Resources	20%

Please see the attached at pages 222 - 350.

### KENTUCKY-AMERICAN WATER COMPANY CASE NO. 2014-00258

#### COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

#### Witness: Brent E. O'Neill

- 16. At page 19 of his direct testimony, Mr. O'Neill explains that the three "Contractor at Risk" proposals were evaluated by a team of four Kentucky-American employees and representatives of Hazen and Sawyer.
  - a. Provide a list of all Kentucky-American and American Water employees and Hazen and Sawyer representatives who participated in the evaluation of the three "Contractor at Risk" proposals. For each Kentucky-American employee listed, provide the employee's:
    - (1) Name;
    - (2) Title;
    - (3) Length of employment; and
    - (4) Job duties.
  - b. Provide all correspondence, electronic mail, analysis, notes, memoranda, studies, and related documents that were prepared as part of the evaluation of the three "Contractor at Risk" proposals.

#### **Response:**

a. The list of employees that participated in the design of the filter building are as follows:

**Zachery Dukes** 

Project Manager Engineer

2 years with Kentucky American Water

Project manager for Richmond Road Station Filter Building.

Brent O'Neill

Director of Engineering

18 years with American Water

Coordination of the Engineering Departments for both Kentucky American Water and Tennessee American Water, which includes the planning, development, and implementation of all aspects of construction projects.

Ronald (Kevin) Kruchinski Superintendent Operations 8 years with Kentucky American Water

Manages the operations and maintenance of the production facilities for Kentucky American Water including the Richmond Road Station Facility

Keith Cartier

**Vice President Operations** 

9 years with American Water

Manages the operations of the production and network facilities for Kentucky American Water

Bret M. Casey

Project Manager for Hazen and Sawyer

25 years of experience in consulting engineering

Project manager and design leader on the design, construction administration, and startup for the RRS Filter Building.

Robert A. Green

Process Design for Hazen and Sawyer

28 years of experience in water projects

Process/Mechanical and Conventional Filter design lead for the RRS Filter Building

b. Please refer to the documents attached in response to Item 15 of this same request.

#### Witness: Brent E. O'Neill

- 17. At page 21 of Mr. O'Neill's direct testimony is a breakdown of the estimated project cost of \$15,600,000; however, in the HDR Evaluation Report, HDR estimates that the total project cost will be \$13,602,628.
  - Provide a cost breakdown for the \$13,602,628 HDR estimate similar to the a. schedule in Mr. O'Neill's testimony.
  - Provide a detailed explanation for the approximate \$2 million difference between b. the two cost estimates.
  - c. Provide a more detailed cost breakdown of the estimated construction cost of \$13,568,055 that appears on line 9, page 21 of Mr. O'Neill's direct testimony. Include all assumptions and work papers.
  - d. State whether the estimated cost of the project of \$15 million includes an estimated cost of construction contingencies, and if so, identify the estimated cost of construction contingencies.

#### **Response:**

Preliminary (\$1,575,000) a. Project Development and Engineering Design

\$ 1,575,000

#### C

Construction (\$10,882,102)	
Construction Costs (\$9,462,697)	
Division 1 – General Conditions	\$
Division 2 - Sitework	\$
Division 3 – Concrete	\$
Division 4 – Masonry	\$
Division 5 – Metals	\$
Division 7 – Thermal and Moisture Protection	\$
Division 8 – Doors and Windows	\$
Division 11 – Process Equipment	\$
Division 13 – Special Construction	\$
Division 15 – Mechanical	\$
Division 16 – Electrical	\$
Division 17 – Control and Information Systems	\$
Contractor Fixed Fees	\$
Contingency (9%)	\$ 1,145,526

b. The HDR estimate only considered their best estimate of the construction costs and engineering costs for the project. The HDR estimate did not take into

consideration the cost of the project to the company that included Kentucky-American labor costs, overhead costs, and project financing costs. These costs are approximately \$783,292 of the \$2,000,000 difference between the HDR estimate and the current company estimate. The remaining difference was due solely to the fact that HDR assumptions were based on a project concept, relying on HDR's knowledge of previous job costs. HDR relied on project cost percentages to determine HVAC and Plumbing, Electrical and Instrumentation and Miscellaneous Improvements. In addition, HDR's concept did not include a Chlorine Contact Tank that is currently included in the final design.

c. Construction Costs (\$13,568,055)

Division 1 – General Conditions	\$ 687,481
Division 2 - Sitework	\$ 1,940,575
Division 3 – Concrete	\$ 2,833,844
Division 4 – Masonry	\$ 259,804
Division 5 – Metals	\$ 160,586
Division 6 – Woods and Plastics	\$ 8,240
Division 7 – Thermal and Moisture Protection	\$ 269,676
Division 8 – Doors and Windows	\$ 48,839
Division 9 – Painting	\$ 112,672
Division 10 – Specialties	\$ 5,672
Division 11 – Process Equipment	\$ 589,940
Division 13 – Special Construction	\$ 1,334,450
Division 15 – Mechanical	\$ 2,285,137
Division 16 – Electrical	\$ 1,209,888
Division 17 – Control and Information Systems	\$ 696,358
Contractor Fixed Fees (Supervision)	\$ 929,893
Engineering Services	\$ 195,000

d. The project estimated cost of \$15.6 million includes an estimated cost of construction contingencies of 5% or \$780,000. This amount is included within the Construction Project Costs as previously stated at page 21 of Mr. O'Neill's direct testimony.

#### Witness: Linda C. Bridwell

- 18. At page 4 of her direct testimony, Linda Bridwell states that "[t]he project will initially be funded by available funds from a previous financing or short-term bank borrowings. . . ." In Case No. 2012-00393, Kentucky-American was authorized to participate in the American Water Capital Corporation borrowing program and to issue securities in the form of notes or debentures in an aggregate amount of \$20 million, prior to December 31, 2014. On May 15, 2013, Kentucky-American issued \$7,859,000 of debt, leaving a balance of debt to be issued of \$12,141,000.
  - a. Provide the expected issuance date(s) for the remaining long-term debt of \$12,141,000.
  - b. Identify the amount of the long-term debt that will be used to refinance Kentucky-American's short-term debt.
  - c. Identify the amount of long-term debt that will be available to fund the RRS Filter Building.
  - d. In Case No. 2012-00393, Kentucky-American projected that American Water Works Company would make equity infusions of \$8 million during the two-year period from November 2012 to November 2014. Identify any of the \$8 million that will be available to Kentucky-American to fund the RRS filter building.

#### **Response:**

a. At this time, an issuance date has not been established. It is anticipated that it will occur after December 31, 2014, and will thus require additional authorization from the Public Service Commission.

- b. As of July 31, 2014, KAW's short-term debt balance was \$14,126,000. At the time that additional long-term debt is issued, the Company will use all of the proceeds, after expenses, to refinance short-term debt.
- c. KAW does not tie any of its sources of capital, including long-term debt, to specific projects. The Company finances its entire capital program through short-term debt and cash from operations, periodically issuing long-term debt and receiving equity infusions from its parent (American Water Works Company, Inc.) as needed to maintain the appropriate capital structure as authorized. The

<sup>&</sup>lt;sup>1</sup> 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).

only exception to that has been during the construction of KRS II when specific tax-exempt debt was issued to finance the plant construction.

d. KAW's most recent equity infusion was in July 2012 in the amount of \$4,000,000. Since that time, capital investment has been funded through cash from operations, short-term debt, and long-term debt of \$7,859,000 issued on May 15, 2013. KAW expects that equity infusions will be made by American Water Works Company on a periodic basis to maintain an appropriate capital structure. However, as noted previously, a particular source of capital, such as common equity, cannot be tied to a specific construction project.

#### Witness: Brent E. O'Neill

- 19. Refer to Kentucky-American's Response to the Commission Staff's First Request for Information in Case No. 2012-00520,<sup>2</sup> Item 10. Kentucky-American's 2015 construction budget included a project at the RRS filter building that cost \$5 million.
  - a. Provide a detailed description of the budgeted project identified in Case No. 2012-00520.
  - b. Provide a comparison and reconciliation of the budgeted project in Case No. 2012-00520 to the requested construction at the RRS filter building submitted in this proceeding.

#### **Response:**

- a. The project identified and referred to as "RRS filter building" in Case No. 2012-00520 is the same project at issue in this case. The documents in Case No. 2012-00520 showed only the amount projected to be spent in calendar year 2015. At that time, KAW was aware of the need for the project, but the details and expected expenditures were not known at nearly the level of detail that is now known. During the period that the response in 2012-00520 was developed, a project to address the RRS filter building that would cost as much as \$16 million to repair or replace the building was under discussion. The \$5,000,000 in 2015 was only the start of the improvements for the project and additional construction cost would be included in 2016 and possibly 2017.
- b. The project identified in Case No. 2012-00520 is an earlier concept and similarly scoped project as is being submitted for this proceeding. As mentioned above, the reason for the differences is the time frame that the original exhibit provided.

<sup>2</sup> Case No. 2012-00520, *Application of Kentucky-American Water Company for an Adjustment of Rates Supported by a Fully Forecasted Test Year*, Response to Commission Staff's First Request for Information, Item 10 (filed Jan. 23, 2013).