

ORIGINAL

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF INDIANA-AMERICAN WATER )  
COMPANY, INC., AN INDIANA CORPORATION, )  
FOR APPROVAL OF (1) EXPENDITURES FOR )  
CONSTRUCTION OF ADDITIONS AND )  
IMPROVEMENTS TO PETITIONER'S WATER )  
UTILITY PROPERTIES SERVING THE WARSAW )  
OPERATIONS IN KOSCIUSKO COUNTY AND (2) )  
THE INCLUSION OF SUCH NEW FACILITIES IN )  
PETITIONER'S RATE BASE IN FUTURE CASES. )

CAUSE NO. 43899

APPROVED:

OCT 14 2010

**BY THE COMMISSION:**

**Carolene R. Mays, Commissioner**  
**Aaron A. Schmoll, Senior Administrative Law Judge**

On May 17, 2010, Indiana-American Water Company, Inc. ("Petitioner" or "Indiana-American") filed its Petition seeking Commission approval of expenditures for construction and improvements to its water utility properties serving its Warsaw operations. Petitioner further seeks confirmation that such improvements will be included in Petitioner's rate base in rate cases after they have been placed in service. On May 17, 2010, Indiana-American also filed the direct testimony and exhibits of Stacy S. Hoffman, Director-Engineering.

On June 23, 2010, the Commission conducted a prehearing conference and preliminary hearing, and on June 30, 2010, the Commission issued its prehearing conference order establishing the procedural schedule in this Cause. On August 10, 2010, the Office of Utility Consumer Counselor ("OUCC") prefiled the testimony of Harold L. Rees, Senior Utility Analyst. On August 17, 2010, Indiana-American filed revised testimony of Mr. Hoffman. On August 23, 2010, Indiana-American filed rebuttal testimony of Mr. Hoffman.

Pursuant to notice published as required by law, proof of which was incorporated into the record by reference and placed in the official files of the Commission, a public evidentiary hearing in this Cause was held at 1:30 p.m. on September 9, 2010 in Room 222, PNC Center, 101 W. Washington St., Indianapolis, Indiana. Petitioner and the OUCC appeared and participated at the hearing, and each party's respective evidence was offered and admitted in evidence without objection. No other parties or members of the general public appeared.

The Commission, having considered the evidence of record and the applicable law, now finds:

1. **Notice and Jurisdiction.** Due, legal and timely notice of the prehearing conference and the public evidentiary hearing conducted herein was given by the Commission as required by law. Petitioner is a "public utility" within the meaning of that term in Ind. Code § 8-1-2-1 and is subject to the jurisdiction of the Commission in the manner and to the extent provided by law. The Commission has jurisdiction over Petitioner and the subject matter of this proceeding.

**2. Petitioner's Characteristics.** Petitioner is a public utility incorporated under the laws of the State of Indiana. It is engaged in the business of rendering water utility service to the public in and adjacent to numerous communities in 21 counties of the State of Indiana and sewer utility service in two counties of the State of Indiana. Among these operations, Petitioner provides water utility service in the communities of Warsaw, Winona Lake and surrounding areas in the central part of Kosciusko County, Indiana (the "Warsaw Operation"). Petitioner owns, operates, manages and controls plant, property, equipment and facilities within and adjacent to the communities where Petitioner serves, which are used and useful for the collection, purification, pumping, distribution and furnishing of water to the public in such areas and for providing sewer utility service.

**3. Relief Requested.** Petitioner seeks approval of expenditures for construction, additions or improvements to Petitioner's source of supply, treatment and transmission facilities serving Petitioner's Warsaw Operation and confirmation that such approved improvements will be included in Petitioner's rate base in future rate cases once they have been placed in service. Petitioner is planning to construct additional plant and equipment to improve service reliability and quality as well as meet growing demands (referred to herein as the "Proposed Improvements"). The Proposed Improvements will consolidate the sources of supply and treatment to one location near the existing North plant. The Proposed Improvements include a new iron and manganese removal treatment facility to be known as the "Hidden Lake Water Treatment Facility" at the existing North plant site, additional groundwater source of supply in an upper aquifer along the Tippecanoe River on newly acquired property, and a new pump station at the existing West distribution tank. Included within the Proposed Improvements will be the associated transmission mains. Petitioner is in the process of preparing the design for the Proposed Improvements and plans to place the improvements in service by September 30, 2011. The total estimated cost for the Proposed Improvements is \$25,300,000.

**4. Description of Proposed Improvements.** Mr. Hoffman described the Proposed Improvements of which Indiana-American is seeking pre-approval. He testified that Indiana-American provides water service to approximately 4,570 customers within its Warsaw Operation. The service area includes the communities of Warsaw, Winona Lake and surrounding areas in the central part of Kosciusko County. The system is separated into four pressure gradient zones, Main, East, Winona, and Southwest. The Main zone serves the largest geographic portion of the service area from the north, south to the central part of Warsaw. The East zone serves an area east of the Main zone. The Winona zone serves the Winona Lake community southeast of Warsaw. The Southwest zone serves an area southwest of the Main zone. The average day demand of the Warsaw Operation in 2009 was 2.64 million gallons per day ("mgd"). The historic maximum day usage of 4.169 mgd occurred in 2001.

Mr. Hoffman explained that Indiana-American obtains its water supply from six groundwater wells at three separate plant locations in the Main zone and three groundwater wells at a fourth plant location in the East zone. He stated that the combined total well capacity from these sources is 4.56 mgd and firm capacity with the largest well out of service is 4.08 mgd. Mr. Hoffman stated that this current firm source of supply capacity is less than the maximum day demand of record of 4.169 experienced in 2001 and is less than the 2010 projected maximum day demand of 5.26 mgd. He explained that treated supply in the Main zone is transmitted to the Southwest and Winona zones because those zones do not have separate sources of supply. He

stated that an in-line booster also delivers water from the Main zone to the East zone to help meet demands in the East zone.

Mr. Hoffman testified there are four treatment plants, with locations as shown on Exhibit 1 to Petitioner's Exhibit SSH-1. He stated three of the treatment facilities are located in the Main zone: the North, Bibler and West plants. He explained that treatment at the North and Bibler plants consists of chemical treatment including polyphosphate feed for sequestration of iron and manganese, sodium hypochlorite feed for disinfection, and hydrofluosilicic acid feed for fluoridation. There is no filtration at these two plants. Mr. Hoffman explained that treatment at the West plant includes forced draft aeration and detention for stripping volatile organic compounds (VOCs) and for oxidization of iron and manganese. The West plant treatment does include filtration for removal of iron and manganese, gaseous chlorine feed for disinfection, and hydrofluosilicic acid feed for fluoridation. Mr. Hoffman stated the fourth treatment facility is located in the East zone and is known as the East plant. Treatment at the East plant includes forced draft aeration and detention for oxidization of iron and manganese, as well as filtration for removal of iron and manganese, gaseous chlorine feed for disinfection, and hydrofluosilicic acid feed for fluoridation.

Mr. Hoffman testified that although the West and East plants effectively remove iron and manganese through oxidization, detention, and filtration, the location, age and condition of both plants require that they be replaced. He explained that both plants have reached an age at or near the end of their useful lives. In addition, the West plant is located below the 100 year flood elevation and in an area where the raw water has VOC contamination. Mr. Hoffman testified that the West plant has been flooded numerous times over the years, including two times in the last two years. The floods have created significant risk to maintaining water service to customers. Losing the operation of the plant to one of these floods would result in service disruption to a large portion of the communities served. Flooding could also result in chemical and chlorine gas release that could endanger the health of persons in the area of the release. Mr. Hoffman also explained the risks from the age of the West plant, including failure of the filter that could require extensive steel work that could result in the filter being out of service for days, resulting in a service outage to a large portion of the communities served. Mr. Hoffman testified that although Indiana-American has always delivered water in full compliance with the Environmental Protection Agency's (EPA's) maximum contaminant level (MCL) for VOCs, the design of the plant (which is dependent on a single aeration unit for removal of VOCs) poses a risk for providing adequate water at the facility because failure of that unit would require plant shutdown.

According to Mr. Hoffman's testimony, the East plant is older than the West plant and is located in an industrial part of town, which is susceptible to groundwater contamination. Mr. Hoffman explained that the multiple filter failures experienced at the East plant in recent years indicate a significant decline in the reliability of the filter and an end to its useful life. Like the West plant, a failure of the filter at the East plant that requires extensive steel work could result in the filter being out of service for days, resulting in a service outage to a large portion of the communities served. In addition, one of the wells failed in 2006, requiring replacement. Because the wells serving the East plant are located in an industrial area, the location presents an additional risk to water quality as compared with the North and Bibler well field locations, although Mr. Hoffman stated that no contamination has been detected in the wells.

Mr. Hoffman then described the condition and adequacy of the existing North and Bibler treatment facilities. He explained that because they are not filtered, the North and Bibler plants do not remove iron and manganese, but rather rely on sequestration of those contaminants. High iron and hardness levels in the groundwater present challenges for this type of treatment. Over time, the sequestration treatment breaks down, resulting in customer complaints regarding discolored water, and stained laundry, sinks, showers, tubs, toilets and related fixtures.

Mr. Hoffman explained that the EPA has established secondary maximum contaminant levels (SMCLs) for iron and manganese. These secondary contaminants are not considered to present a risk to human health at the SMCL, but the presence of them above the SMCLs can cause the water to be cloudy and colored, to taste bad and to smell bad. He stated that the EPA's SMCL for iron is 0.3 milligrams per liter (mg/L) while the average raw water iron levels at the Bibler plant range from 0.72 to 1.28 mg/L, with high levels reaching 1.73 mg/L, and the average raw water iron levels at the North plant range from 0.99 to 1.56 mg/L, with high levels reaching 2.24 mg/L. Average raw water manganese levels at the Bibler plant range from 0.021 to 0.049 mg/L with high levels reaching 0.062 mg/L, while the levels at the North plant range from 0.014 to 0.051 mg/L with high levels reaching 0.085 mg/L. EPA's SMCL for manganese is 0.05 mg/L.

Mr. Hoffman testified that a Comprehensive Planning Study ("CPS") was finalized in May 2010 that identified the need for new treatment facilities to improve service reliability and reliability of water quality as a result of the concerns described above, as well as to increase capacity to meet growing projected demands. Mr. Hoffman testified that the Warsaw system currently has a source of supply deficit. The CPS projected the maximum day demand would reach 5.26 mgd in 2010. This exceeds the current firm source of supply capacity of 4.08 mgd by 1.18 mgd. By 2015, the projected firm capacity deficit is 1.43 mgd. The CPS also recommended that the new treatment facilities address the iron and manganese issues at North and Bibler by filtering all of the water supplied to customers in the Warsaw Operation.

The CPS presented multiple alternatives and variations of alternatives for new treatment, including (1) construction of four new plants near each of the existing locations, (2) consolidation of sources of supply and treatment to three locations near three of the existing locations, (3) consolidation of sources of supply and treatment to two locations near two of the existing locations, and (4) consolidation of sources of supply and treatment to one location near one of the existing locations. Consolidation of the sources of supply and treatment to one location near the existing North plant was identified as the lowest cost, best alternative. Mr. Hoffman explained that Indiana-American owns adequate property at the North plant location for construction of new treatment facilities and that location is also in close proximity to the Tippecanoe River, which provides recharge to an upper aquifer suitable for a community water supply. He testified that the proposed firm capacity of the new treatment plant is 6.0 mgd, which will meet projected maximum day demands of 5.26 mgd and 5.89 mgd for 2010 and 2025 respectively.

Mr. Hoffman identified additional improvements recommended in connection with this alternative, including: (1) approximately 2,700 feet of 20-inch transmission main, 900 feet of 16-inch transmission main and 3,500 feet of 12-inch transmission main to convey water from the new plant to the system, (2) 2,000 feet of 24-inch main, 1,600 feet of 16-inch main, 1,000 feet of 12-inch main and 800 feet of 8-inch main expected to be included in the new source of supply,

and (3) a new pump station at the existing West tank to enable continued use of the tank at the new gradient set by the proposed plant.

Mr. Hoffman testified that a hydrogeologic study was performed in 2009 which evaluated the upper aquifer along the Tippecanoe River near the existing North plant location. The study indicated that as much as 7.2 mgd total capacity and 6.0 mgd firm capacity could be produced from the existing property at the existing North plant plus two properties along the river for which options to purchase the real estate were negotiated prior to exploratory drilling and pump testing. Water quality analyses showed no detection of most contaminants, other than iron and manganese, which will be removed with the proposed treatment facilities.

The planned improvements for which Indiana-American seeks preapproval in this Cause were summarized by Mr. Hoffman, and include: (1) new Hidden Lake Water Treatment Plant, which will be an iron and manganese removal treatment facility located at the existing North plant site, (2) additional groundwater source of supply in an upper aquifer along the Tippecanoe River on newly acquired property to supplement two existing wells on the existing North plant property, (3) associated raw water main, (4) finished water transmission main, and (5) a new pump station at the existing West distribution tank to enable continued use of the West tank at the higher gradient delivered by the new treatment facility. Included in the project are replacement of one existing well at the existing North plant site and construction of five new wells in the upper aquifer along the Tippecanoe River on the newly acquired property. The replacement well at the existing North plant site and the remaining existing well at that site will have estimated capacities of 500 gpm each. The new wells will be capable of delivering 800 gpm each. Total capacity of all wells is expected to be 7.14 mgd, with firm capacity with the largest well out of service expected to be 6.0 mgd. Wells and treatment facilities at the existing East and West plants will be retired. The existing sequestering treatment at the existing North and Bibler plants will also be retired.

The total estimated cost for the project is \$25,300,000. Mr. Hoffman explained that this cost could potentially be reduced if the Indiana Department of Environmental Management (IDEM) were to approve a higher filter loading rate than the standard permit requirement of 3 gallons per minute per square foot (gpm/ft.<sup>2</sup>). Mr. Hoffman stated Indiana-American plans to seek approval from IDEM of a higher filter loading rate that will increase filter capacity to meet projected maximum day demands. If IDEM does not approve the higher filter loading rate, Indiana-American will need to add an additional filter to meet projected maximum day demands. Mr. Hoffman stated the plant would be designed to accommodate a filter addition in the case IDEM does not approve a higher filter loading rate. If IDEM approves a higher filter loading rate, the project cost will be reduced by the cost of construction of one filter and related piping and appurtenances. In addition, the project cost estimate includes a structure for recycling backwash water. Mr. Hoffman explained that Indiana-American plans to seek permission from IDEM to construct lagoons in lieu of a backwash recycle facility. If IDEM approves lagoons for the treatment facility, the project cost would be reduced by the cost difference between the recycle facility and the lagoons. Mr. Hoffman's revised testimony stated that the estimated cost savings from these two cost-saving alternatives would be between \$1,000,000 and \$1,200,000.

Mr. Hoffman stated Indiana-American plans to place the Proposed Improvements into service by September 30, 2011. He explained that Indiana-American purchased one parcel for the new source of supply along the Tippecanoe River on April 26, 2010 and a second parcel was

scheduled to be purchased in June 2010. Detailed proposals from three design-build teams were received on January 20, 2010 and Indiana-American awarded the project to the team with the best proposal based on an evaluation of costs and quality considerations. Design work has commenced and site preparation work was begun in August 2010.

Mr. Hoffman testified that the Proposed Improvements are reasonably necessary and the needs of the Warsaw system cannot reasonably be met for less cost than the estimated cost of the Proposed Improvements.

**5. OUCC's Evidence.** The OUCC submitted the prefiled testimony of Mr. Rees as its evidence in this Cause. Mr. Rees stated that the OUCC does not oppose Indiana-American's request for pre-approval of the proposed expenditures for construction, additions, or improvements to Indiana-American's source of supply, treatment and transmission capacity serving its Warsaw Operation, except for the expenditure associated with the pressure filter, as IDEM may determine that filter is not necessary for Indiana-American's operations at this time. If this expenditure is disallowed, the total approved expenditure allowed according to Mr. Rees's testimony would be limited to \$25,050,000.

Mr. Rees made other observations in his testimony regarding the existing Warsaw Operation generally. He commented that the OUCC recommends that in the future, Indiana-American increase its valve turning rate to be more than 20% a year as the capability exists. He also commented that mechanized valve turning equipment could be helpful. Mr. Rees further noted that it was difficult to evaluate the Warsaw District's lost water performance based on variations in the non-revenue water data provided in Cause No. 43680. He asserted that current storage capacity does not meet Ten States Standards' recommendation that, separate from capacity required for fire protection, the minimum storage capacity be equal to the average daily consumption. Mr. Rees also testified that Indiana-American should develop a regular program for its Warsaw District in order to gradually retire its cast iron mains.

**6. Petitioner's Rebuttal.** Indiana-American Witness Hoffman offered rebuttal testimony addressing Mr. Rees's recommendation regarding Indiana-American's pre-approval request as well as other recommendations in Mr. Rees's testimony regarding operational information and practices unrelated to the pre-approval request. Mr. Hoffman stated that Indiana-American is willing to proceed without preapproval of the contingent cost of the additional pressure filter. He stated that if IDEM does not approve higher filter loading rates, Indiana-American will install the additional filter at that time and will advise the Commission and the OUCC of IDEM's determination when the cost of the additional filter is included in a future rate case.

Mr. Hoffman then responded to Mr. Rees's comments on general operational matters. He noted that none of those operational matters discussed by Mr. Rees touch on whether the new plant is needed. With respect to Mr. Rees's comments regarding Indiana-American's valve turning practices, Mr. Hoffman responded that the Warsaw Operation has not had problems with locating valves or with completing needed shutdowns. He stated that currently when emergency shutdowns are required, the average length of time a customer is without service is less than one hour. He pointed out that the Warsaw Operation currently averages less than seven main breaks per year, which Mr. Rees acknowledged in his testimony does not indicate a significant problem.

Mr. Hoffman explained that mechanized valve-turning equipment is available for use by the Warsaw Operation when needed.

With respect to the non-revenue water data cited by Mr. Rees, Mr. Hoffman pointed out that the cited data had been corrected in Cause No. 43680 and the correct figures should address Mr. Rees's concern regarding the wider variation implied by the incorrect data.

Mr. Hoffman also addressed Mr. Rees's comments regarding Indiana-American's current storage capacity by citing to the provision of the current edition of the Ten States Standards, which states that the minimum storage capacity requirement "may be reduced when the source and treatment have sufficient capacity with standby power to supplement peak demands in the system." Ten States Standards (2007 Ed.) Part 7.01.b. Mr. Hoffman testified that the Warsaw Operation does maintain standby power to operate the Warsaw District source of supply and treatment and that notwithstanding this standby power, additional storage is included in the planned new clearwell storage volume at the plant, as identified in the CPS.

Finally, Mr. Hoffman responded to Mr. Rees's concerns regarding the aging water main infrastructure, stating that Indiana-American has implemented a regular program for replacing the infrastructure, as evidenced by Indiana-American's investments and its DSIC filings with the Commission.

7. **Commission Discussion and Findings.** Petitioner's request for approval of expenditures is filed pursuant to § 8-1-2-23. This section, in pertinent part, provides as follows:

Unless a public utility shall obtain the approval by the commission of any expenditure exceeding ten thousand dollars (\$10,000) for an extension, construction, addition or improvement of its plant and equipment, the commission shall not, in any proceeding involving the rates of such utility, consider the property acquired by such expenditures as a part of the rate base, unless in such proceeding the utility shall show that such property is in fact used and useful in the public service; Provided, That the commission in its discretion may authorize the expenditure for such purpose of a less amount than shown in such estimate.

In the Commission's Order in *American Suburban Utilities, Inc.*, Cause No. 41254 (Apr. 14, 1999), we set forth our analytical framework for considering a request for pre-approval of expenditures pursuant to Ind. Code § 8-1-2-23:

When faced with such a request, the first question we must ask is whether an expenditure of any amount is reasonably necessary to assure reasonable and adequate service. If so, we must proceed to the second question: what amount reasonably needs to be invested?

*Id.* at p. 14; *see also*, *Indiana-American Water Co.*, Cause Nos. 41692 (Nov. 8, 2000) and 43320 (Jan. 30, 2008).

Based upon our review of the evidence in the record, we find the evidence demonstrates a need for the Proposed Improvements. We further find that, for the purpose of preapproving the expenditures associated with the Proposed Improvements, Petitioner's \$25,300,000 estimated cost of the Proposed Improvements, less the \$250,000 estimated cost of the expenditure for an additional pressure filter is reasonable and shall be approved. Accordingly, we find the Proposed Improvements, and the expenditures associated therewith, as modified herein with respect to the one pressure filter, shall be approved. Once the Proposed Improvements are in service, Petitioner is authorized, for ratemaking purposes, to include the actual cost of the Proposed Improvements (less accumulated depreciation) in its net original cost rate base in future rate cases. To the extent actual costs of the Proposed Improvements exceed \$25,050,000, Petitioner will have the burden to demonstrate the excess was reasonable and was prudently incurred in order to include the excess in rate base for ratemaking purposes.

**IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION, that:**

1. Petitioner's Proposed Improvements and the expenditures associated therewith, as modified as provided in Paragraph 7 of this Order, shall be and hereby are approved by the Commission. Specifically, Petitioner's request for approval of expenditures for the Proposed Improvements is approved up to \$25,050,000.

2. To the extent the actual costs exceed the estimates, inclusion of such additional costs in rate base in future rate cases shall be addressed as other rate base additions that have not been pre-approved.

3. Petitioner shall be and hereby is authorized to include the Proposed Improvements in rate base for ratemaking purposes after the Proposed Improvements are in service.

4. Once all of the Proposed Improvements are in service, Petitioner shall file notice, under this Cause, of the actual cost of the Proposed Improvements.

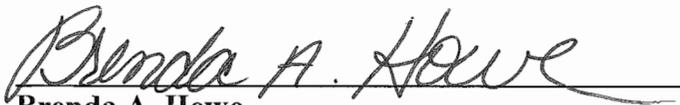
5. This Order shall be effective on and after the date of its approval.

**ATTERHOLT, LANDIS, MAYS, AND ZIEGNER CONCUR:**

**APPROVED:**

OCT 14 2010

**I hereby certify that the above is a true and correct copy of the Order as approved.**



**Brenda A. Howe**

**Secretary to the Commission**