**BEFORE THE PUBLIC SERVICE COMMISSION**

**OF THE STATE OF DELAWARE**

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| **IN THE MATTER OF THE APPLICATION OF CHESAPEAKE UTILITIES CORPORATION FOR APPROVAL OF A CHANGE IN ITS GAS SALES SERVICE RATES ("GSR") TO BE EFFECTIVE NOVEMBER 1, 2017 (FILED SEPTEMBER 1, 2017)** | **)** | **PSC DOCKET NO. 17-1021** |

# DIRECT TESTIMONY OF

# JEROME D. MIERZWA

**ON BEHALF OF THE**

**STAFF OF THE DELAWARE PUBLIC SERVICE COMMISSION AND THE DIVISION OF THE PUBLIC ADVOCATE**

**February 28, 2018**

EXETER
ASSOCIATES, INC.
10480 Little Patuxent Parkway, Suite 300
Columbia, Maryland 21044

CHESAPEAKE UTILITIES CORPORATION
DOCKET NO. 17-1021
DIRECT TESTIMONY OF JEROME D. MIERZWA

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## I. STATEMENT OF QUALIFICATIONS

**Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?**

A. My name is Jerome D. Mierzwa. I am a Principal and Vice President of Exeter Associates, Inc. ("Exeter"). My business address is 10480 Little Patuxent Parkway, Suite 300, Columbia, Maryland 21044. Exeter specializes in providing public utility-related consulting services.

**Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

A. I graduated from Canisius College in Buffalo, New York in 1981 with a Bachelor of Science Degree in Marketing. In 1985, I received a Master's Degree in Business Administration with a concentration in finance, also from Canisius College. In July 1986, I joined National Fuel Gas Distribution Corporation ("NFG Distribution") as a Management Trainee in the Research and Statistical Services Department ("RSS"). I was promoted to Supervisor RSS in January 1987. While employed with NFG Distribution, I conducted various financial and statistical analyses related to the company's market research activity and state regulatory affairs. In April 1987, as part of a corporate reorganization, I was transferred to National Fuel Gas Supply Corporation's ("NFG Supply's") rate department where my responsibilities included utility cost of service and rate design analysis, expense and revenue requirement forecasting, and activities related to federal regulation. I was also responsible for preparing NFG Supply's Federal Energy Regulatory Commission ("FERC") Purchase Gas Adjustment ("PGA") filings and developing interstate pipeline and spot market supply gas price projections. These forecasts were utilized for internal planning

purposes as well as in NFG Distribution's state purchased gas cost review proceedings.

In April 1990, I accepted a position as a Utility Analyst with Exeter. In December 1992, I was promoted to Senior Regulatory Analyst. Effective April 1, 1996, I became a Principal of Exeter. Since joining Exeter, my assignments have included evaluating the gas purchasing practices and policies of natural gas utilities, utility class cost of service and rate design analysis, sales and rate forecasting, performance-based incentive regulation, revenue requirement analysis, the unbundling of utility services, and the evaluation of customer choice natural gas transportation programs.

**Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY PROCEEDINGS ON UTILITY RATES?**

A. Yes. I have provided testimony on more than 200 occasions in proceedings before the FERC, utility regulatory commissions in Arkansas, Georgia, Illinois, Indiana, Louisiana, Maine, Massachusetts, Montana, Nevada, New Jersey, Ohio, Pennsylvania, Rhode Island, Texas, Utah, and Virginia, as well as before the Delaware Public Service Commission ("Commission").

## II. SCOPE AND PURPOSE OF TESTIMONY

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

A. Exeter was retained by the Staff of the Delaware Public Service Commission ("Staff") and the Division of the Public Advocate ("DPA") to review the Gas Sales Service Rate ("GSR") Application of Chesapeake Utilities Corporation ("Chesapeake" or "the Company"), and evaluate the reasonableness of the

Company's gas procurement practices and policies. The purpose of my testimony is to present findings and recommendations to the Commission concerning the GSR Application and the Company's ongoing gas procurement practices and policies. Also testifying in this proceeding on behalf of Staff is Mr. Jason R. Smith. Mr. Smith summarizes the Company's GSR Application and proposed rates and also addresses prior GSR settlement agreements.

**Q. HAVE YOU PREVIOUSLY TESTIFIED IN CHESAPEAKE GSR PROCEEDINGS?**

A. Yes. I have testified in each of Chesapeake's annual GSR proceedings since 2012.

**Q. IN PERFORMING YOUR REVIEW AND ANALYSIS, WHAT DATA SOURCES DID YOU UTILIZE?**

A. I reviewed the Company's Application, responses to discovery requests, and the Company's 2017 Long-Term Gas Supply and Demand Strategic Plan. I also reviewed information provided in other Company proceedings before the Commission.

**Q. WAS THIS TESTIMONY PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?**

A. Yes, I prepared this testimony.

## III. RECOMMENDATIONS

**Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS.**

A. My recommendations are as follows:

- Certain prospective modifications should be made to the Company's design and calculation of the balancing charges assessed to transportation customers that were approved in Docket No. 13-383. These modifications include: (1) reflecting the annualized costs associated with the Eastern Shore Natural Gas ("ESNG") capacity

utilized by Chesapeake to provide balancing service; (2) including actual liquified natural gas ("LNG") peaking service and propane costs in the balancing charge calculation; (3) excluding upstream non-storage related pipeline transportation capacity; and (4) reflecting the recent changes in ESNG's rate design structure;

- Several provisions of the settlement approved in Chesapeake's 2016 GSR proceeding should be extended for an additional year;

- Chesapeake should not be authorized to acquire additional ESNG capacity until it demonstrates that its design day demand forecasts are reasonable; and

- The Company should not retire any of its on-system propane facilities unless it can demonstrate that retirement of a facility is in the best interest of its ratepayers.

## IV. TRANSPORTATION CUSTOMER BALANCING CHARGES

**Q. BRIEFLY DESCRIBE CHESAPEAKE'S INTERSTATE PIPELINE CAPACITY TRANSPORTATION, OR DELIVERY, ARRANGEMENTS.**

A. Chesapeake is directly interconnected with only one interstate pipeline—ESNG, a Chesapeake affiliate. Therefore, all of Chesapeake's gas supplies are physically delivered to the Company by ESNG, and Chesapeake reserves capacity on ESNG for the delivery of its gas supplies. However, ESNG's facilities are not located in a natural gas production region and, therefore, Chesapeake also reserves capacity on three interstate pipelines which are upstream of ESNG that deliver gas from production regions to ESNG. These pipelines are Transcontinental Gas Pipe Line Corporation ("Transco"), Columbia Gas Transmission Corporation ("Columbia"), and Texas Eastern Transmission Company ("Tetco").

**Q. PLEASE DESCRIBE THE RATE DESIGN STRUCTURE FOR THE CAPACITY CHARGES ASSESSED TO CHESAPEAKE BY ESNG**

**THAT EXISTED AT THE TIME THE COMPANY FILED ITS GSR APPLICATION.**

A. At the time the Company filed its GSR Application, ESNG's rate design structure consisted of two receipt zones (Zones R1 and R2) where gas is received from the three pipelines upstream of ESNG, and three delivery zones (Zones D1, D2, and D3) where gas is delivered to customers of ESNG, including Chesapeake. At the time of its GSR Application, Chesapeake maintained capacity in ESNG receipt Zones R1 and R2, and delivery Zones D2 and D3. As subsequently discussed, ESNG's rate design structure has recently been modified.

**Q. HOW DOES A GAS UTILITY LIKE CHESAPEAKE TYPICALLY DETERMINE THE AMOUNT OF PIPELINE CAPACITY THAT IT SHOULD RESERVE OR MAINTAIN?**

A. A gas utility typically reserves pipeline capacity sufficient to meet the design day demands of its firm retail sales customers. The design day is an extremely cold day that a gas utility selects and utilizes for capacity planning purposes. The design day utilized by Chesapeake for capacity planning purposes is a day with an average temperature of 5˚ F, or 60 heating degree days ("HDDs").

It is also common for gas utilities to reserve pipeline capacity to meet the design day demands of firm transportation customers, or the balancing requirements of their firm transportation customers. If pipeline capacity is reserved to serve firm transportation customers, mechanisms are typically in place to recover the costs associated with this capacity from firm transportation customers.

**Q. DOES CHESAPEAKE CURRENTLY RESERVE PIPELINE CAPACITY TO MEET THE REQUIREMENTS OF ITS FIRM TRANSPORTATION CUSTOMERS?**

A. Yes. Chesapeake currently reserves ESNG pipeline capacity sufficient to meet the design day demands of its firm retail sales and firm transportation customers. The costs associated with the ESNG capacity reserved by Chesapeake to serve firm transportation customers are partially recovered through the direct release and assignment of ESNG capacity to firm transportation customers. The quantity of ESNG capacity assigned to each firm transportation customer is equal to the customer's highest daily contract quantity ("DCQ") during the most recent three-year period. The DCQ is the daily quantity of gas a firm transportation customer is required to have delivered on its behalf to Chesapeake during the month, and is equal to the anticipated average daily usage of the customer during that month.

Chesapeake also reserves ESNG capacity to provide balancing service to transportation customers which accommodates daily differences between a customer's DCQ and the customer's actual daily usage, including meeting the design day demands of the customer that exceeds the customer's DCQ. Chesapeake's costs associated with providing balancing service to firm transportation customers are recovered through balancing charges. These balancing charges are intended to recover the costs associated with the ESNG capacity reserved by Chesapeake to serve firm transportation customers that are not recovered through the direct assignment of ESNG capacity.

Upstream pipeline capacity is not directly assigned to Chesapeake's firm transportation customers. Firm transportation customers acquire their own upstream pipeline capacity to deliver their DCQ to Chesapeake. However, Chesapeake utilizes its upstream pipeline capacity resources to provide balancing service to firm transportation customers.

**Q. WHAT CAPACITY RESOURCES DOES CHESAPEAKE USE TO PROVIDE BALANCING SERVICE TO FIRM TRANSPORTATION CUSTOMERS?**

A. Chesapeake utilizes its upstream pipeline contract storage services and the related upstream transportation capacity used to deliver gas to and from storage (collectively "upstream storage assets") to provide balancing service. Chesapeake also uses its ESNG pipeline capacity, on-system propane facilities, and LNG peaking service to provide balancing service to firm transportation customers.

**Q. HOW ARE THE CHARGES FOR THE BALANCING SERVICE THAT CHESAPEAKE PROVIDES TO FIRM TRANSPORTATION CUSTOMERS CURRENTLY CALCULATED?**

A. Chesapeake's balancing charges are calculated as shown on Schedule J of the Company's filing, and as described in detail on pages 23-33 of the direct testimony of Mr. Matthew E. Everngam. In summary, as shown in Schedule J, page 1, the Company initially identifies the costs associated with each of the specific upstream pipeline storage assets and the ESNG pipeline capacity that is used to provide balancing service. The Company then calculates the weighted average annual cost of the upstream pipeline storage assets and ESNG pipeline capacity, inclusive of the capacity available from its propane facilities. As shown on Schedule J, page 1, the Company maintains upstream storage assets, ESNG capacity, and propane capacity with a maximum daily deliverability quantity ("MDQ") of 27,225 Dth/day and a Company-calculated weighted average annual cost of $154.0190 per Dth. This weighted cost is then blended with the total amount (MDQ) of balancing service that the Company projects it will be required to provide to firm transportation customers on a design day, priced at the Company's weighted average cost of upstream

transportation capacity (exclusive of upstream storage-related transportation capacity), which the Company has determined to be $167.5617. As shown on Schedule J, page 1, the Company projects that it will be required to provide 16,374 Dth of balancing service on a design day. This 16,374 Dth, at a price of $167.5617, is then blended with the $154.0190 per Dth rate to arrive at an annual weighted balancing service demand rate of $159.1057 per Dth. As shown on Schedule J, pages 2-6, this balancing service demand rate is then converted into a commodity (usage) rate for each firm transportation customer class based on the load factor of that class. To this converted commodity charge, applicable pipeline variable storage injection and withdrawal charges are added, as well as an excess upstream capacity surcharge as discussed in greater detail on pages 24-26 of Mr. Everngam's direct testimony, to arrive at the final proposed balancing charges.

**Q. WHEN WAS THE METHOD CURRENTLY USED BY CHESAPEAKE TO CALCULATE BALANCING CHARGES IMPLEMENTED?**

A. The current method used by Chesapeake to calculate balancing charges was approved by the Commission in Docket No. 13-383. As subsequently explained, however, circumstances have changed since the Commission approved the current method of calculating balancing charges and, therefore, the current method should be modified and refined.

**Q. WHAT IS YOUR PRIMARY CONCERN WITH THE CURRENT METHOD USED BY THE COMPANY TO DESIGN BALANCING CHARGES?**

A. As discussed previously, Chesapeake reserves capacity on ESNG to meet the balancing requirements of its firm transportation customers. This ESNG capacity is used to deliver gas from the upstream pipelines that Chesapeake contracts with for

storage service. Chesapeake is generally required to contract for this ESNG capacity on an annual basis, incurring costs for reserving this capacity during each month of the year. However, in determining the costs associated with providing balancing service under the current method, Chesapeake does not include the full annual cost associated with the ESNG capacity utilized to provide balancing service. Chesapeake used the following number of months to determine ESNG capacity costs for the following upstream storage assets:

- Columbia FSS – 6 months
- Transco ESS – 8 months
- Transco LSS – 5 months
- Transco WSS – 5 months
- Transco PS – 3 months

Chesapeake claims it is appropriate to reduce the number of months for which ESNG capacity costs are included in its balancing charge calculation because certain upstream storage assets are not used during the entire year to provide balancing service. (Response to PSC-DPA-62). Regardless of whether these upstream storage assets are used the entire year, Chesapeake is required to pay for the ESNG capacity used to provide balancing service for the entire year. Therefore, 12 months of ESNG capacity costs should be included in the Company's balancing charge calculations for each upstream storage asset.

**Q. DO YOU HAVE OTHER CONCERNS WITH THE CURRENT BALANCING CHARGE RATE CALCULATIONS?**

A. Yes. As previously discussed, the capacity of the Company's on-system propane facilities is included in the Company's balancing charge calculations; however, the costs associated with the propane actually used to provide balancing service are not.

This is inconsistent. Propane costs should be reflected in the Company's balancing charge calculations.

In addition, Chesapeake has recently been acquiring LNG services to meet customer demands during peak periods. These LNG peaking services provide balancing service and, therefore, should also be included in the balancing charge calculation.

**Q. WHAT MODIFICATIONS TO THE CALCULATION OF CHESAPEAKE'S BALANCING CHARGES DO YOU RECOMMEND?**

A. I recommend that the annual costs of the ESNG capacity utilized by Chesapeake to provide balancing service be included in the calculation of balancing charges. I also recommend that LNG peaking service and propane costs be reflected in the balancing charge calculations.

**Q. ARE THERE ANY OTHER CHANGES YOU BELIEVE SHOULD BE MADE TO THE CURRENT BALANCING CHARGE CALCULATIONS?**

A. Yes. As previously explained, the weighted average cost of Chesapeake's storage assets is blended with the Company weighted average cost of upstream firm transportation capacity to develop balancing charges. While this blending was approved in Docket No. 13-383, I don't believe it continues to be necessary. Chesapeake primarily uses its storage assets, rather than its upstream firm transportation capacity assets, to provide balancing service.

In addition, under the current balancing charge calculations, ESNG capacity costs are determined based on the assumption that 60 percent of deliveries to firm transportation customers are made in delivery Zone D2, and 40 percent are made in delivery Zone D3. As subsequently explained, ESNG's rate design structure has

recently changed since the current method of calculating balancing charges was approved. The number of delivery zones has been reduced from three to two (D1 and D2). The balancing charge calculation should be revised to reflect ESNG's new delivery zones and the expected deliveries to firm transportation customers in each delivery zone.

**Q. EARLIER, YOU INDICATED THAT CIRCUMSTANCES HAD CHANGED SINCE THE CURRENT METHOD OF CALCULATING BALANCING CHARGES WAS APPROVED. PLEASE ELABORATE ON THOSE CHANGED CIRCUMSTANCES.**

A. A number of circumstances have changed since the current method of calculating balancing charges was approved. First, as subsequently explained, a settlement has recently been filed in an ESNG FERC base rate proceeding, which, if approved, will increase the cost of ESNG capacity. The settlement is uncontested and, therefore, likely to be approved. Second, as just explained, the settlement also modified ESNG's existing rate design structure. Third, the amount of balancing service that Chesapeake provides to firm transportation customers has increased significantly since the current calculation procedures were approved. In this proceeding, Chesapeake projects that firm transportation customers will require 16,374 Dth of balancing service. When the current procedures were approved, Chesapeake projected the balancing requirements of firm transportation customers to be 7,756 Dth. Finally, Chesapeake has recently been acquiring LNG peaking services, which are used to support the provision of balancing service. The costs associated with the LNG peaking services are not included in the current balancing charge calculation.

**Q. WHEN DO YOU RECOMMEND THAT THESE MODIFICATIONS TO CHESAPEAKE'S BALANCING CHARGE CALCULATIONS BE IMPLEMENTED?**

A. In January 2017, ESNG filed an application with the FERC to increase its base rates (Docket No. RP17-363). These rates went into effect in August 2017, subject to refund, and reflected ESNG's two receipt zone (R1 and R2), and three delivery zone (D1, D2, D3), rate design structure. At the time of ESNG's FERC filing, Chesapeake reserved pipeline capacity in ESNG receipt Zone R2 and delivery Zones D2 and D3. The balancing charge rates proposed by Chesapeake in this proceeding were designed consistent with these receipt and delivery point zone reservations. The rates filed by ESNG in Docket No. RP17-363 would have increased Chesapeake's gas supply rates by approximately 55 percent. In its GSR Application, Chesapeake reflected an increase in ESNG's rates of 28 percent to reflect the likelihood that the final rates approved by FERC in Docket No. RP17-363 would be less than those requested by ESNG in its filing.

A settlement was filed in Docket No. RP17-363 in December 2017. That settlement modified ESNG's existing rate design structure by reducing the number of delivery zones from two to three. As a result of a motion filed by ESNG, the settlement rates went into effect on January 1, 2018, prior to approval of that settlement by the FERC. As of the date of this testimony, the FERC has yet to approve the settlement. Under the settlement rates, Chesapeake will experience a rate increase of approximately 30 percent.

Adopting any balancing charge rate design recommendation in this proceeding to develop revised balancing charges effective November 1, 2017 would be difficult at best given the changes in ESNG's rates and rate design, and

Chesapeake's GSR Application reflecting an estimated FERC-approved increase of 28 percent. Moreover, it is uncertain as to how differences between the revenue collected by Chesapeake for balancing services to date would be reconciled with the revenues that would have been collected under the balancing charges resulting from the adoption of my recommendations. These changes in balancing charges and reconciliation of those charges would likely lead to significant customer confusion. In addition, the revised balancing charges would only be in effect for several months before they are revised in Chesapeake's next GSR Application. Therefore, I recommend that the changes to Chesapeake's balancing charges that I have recommended in this proceeding be implemented prospectively in the Company's next GSR Application.

**Q. HOW DO YOU RECOMMEND THAT YOUR PROPOSED MODIFICATIONS BE REFLECTED IN CHESAPEAKE'S BALANCING CHARGE CALCULATIONS?**

A. With respect to reflecting a full 12 months of the costs associated with ESNG capacity in the balancing charge calculation, those changes can be accomplished by adjusting the Company's projected costs calculations to reflect a full 12 months rather than the fewer number of months currently included in the calculation. With respect to propane and LNG peaking service costs, these costs can be highly variable from year to year. Therefore, I recommend that the actual costs associated with these services be reflected in Chesapeake's balancing charge calculation in the year after the actual costs are known.

## V. OVER- OR UNDER-COLLECTION TARIFF LANGUAGE PROPOSAL

**Q. PLEASE DESCRIBE THE COMPANY'S PROPOSED TARIFF LANGUAGE REGARDING THE FILING OF NEW GAS SALES SERVICE RATES IF THE OVER- OR UNDER-COLLECTION BALANCE FALLS OUTSIDE A BAND OF 3 PERCENT.**

A. The Company's tariff currently provides that if the Company's gas cost over-collection balance exceeds 4½ percent or under-collection balance exceeds 6 percent, the Company must apply to the Commission to revise its GSR to be effective until the next annual adjustment in rates. The Company is proposing the option to file to revise its rates if the over- or under-collection balance exceeds 3 percent. The Company claims that its proposal would provide flexibility to minimize its over/under-collection balance.

**Q. DO THE PSC/DPA OPPOSE CHESAPEAKE'S PROPOSAL?**

A. No. However, PSC/DPA recommends that Chesapeake consult with the PSC and DPA prior to making such a filing. The PSC and DPA reserve the right to challenge any such filing.

## VI. DOCKET NO. 16-0908 SETTLEMENT PROVISIONS

**Q. ARE THERE ASPECTS OF THE SETTLEMENT AGREEMENT APPROVED IN DOCKET NO. 16-0908 THAT YOU ARE RECOMMENDING BE CONTINUED IN THIS PROCEEDING?**

A. Yes. I believe several aspects of the Settlement in Docket No. 16-0908 should be continued:

> **Item 8.** The Company should continue to monitor the level of its over/under collection balance to determine whether a change in the methodology used to calculate its GSR rate is necessary. The Company should hold quarterly discussions with the Staff and DPA, at their

request, for the purpose of review the Company's over/under collection balances, hedging program, and other areas of interest to the Settling Parties, such as what measure could be implemented in the company's annual GSR filing to reduce the volatility of GSR rates caused by the amortization of gas cost over-and-under collections

**Item 9.** The Company should continue to utilize its annual Long-Term Supply and Demand Strategic Plan ("Supply Plan") as a mechanism by which to notify the Settling Parties of the need for all new capacity additions. When the Company needs to acquire capacity that was not previously identified in its most recent Supply Plan, the Company should provide the information agreed to in the Settlement Agreements to PSC Docket Nos. 08-296F and 09-398F regarding Eastern Shore Natural Gas Company ("ESNG") capacity acquisitions and to continue to provide this information for potential upstream capacity additions as well. The Company should provide this information for both ESNG and upstream capacity on a confidential basis only. The Company should continue to review its design day forecasting methodology each year at the time the Supply Plan is developed to ensure its validity. The Company should also review and comment on any alternative design day forecasting methodology proposals submitted by either Staff or the DPA during the course of any review of the Company's Supply Plan.

**Item 14.** Chesapeake should continue to provide Staff and DPA with periodic updates regarding any intervention by the Company in Federal Energy Regulatory Commission ("FERC") proceedings and actions taken by the Company on behalf of the Company's ratepayers, including, but not limited to, an enumeration of each issue and the position that the Company is actively pursuing. The Company should provide such periodic updates to Staff and DPA subject to the Company's ability to provide this information on a confidential basis when appropriate.

**Item 15**. As agreed in prior dockets, the Company should continue with the following practices: (a) the Company will notify Staff and the DPA of any supplier

refunds that may impact the GSR charges; (b) the Company should continue to include in future GSR applications an update on steps taken to mitigate the effects of changes in gas costs; (c) the Company should provide information on the total sales volumes, costs, and margins by month for Interruptible Gas Transportation sales as part of its GSR applications; and (f) the Company will calculate the impact on its proposed GSR rates had a thirty-year average degree days been used and provide such information as part of the discovery process, when and if requested.

## VII. DESIGN DAY PROJECTIONS AND BALANCE OF CAPACITY RESOURCES AND REQUIREMENTS

**Q. WHAT ARE THE COMPANY'S PROJECTED DESIGN DAY DEMANDS FOR THE CURRENT AND FOLLOWING WINTER SEASONS?**

A. Table 1 from the Company's 2017 Long-Term Supply and Demand Strategic Plan, as revised in the response to PSC-DPA-53 and attached to my testimony as Schedule JDM-1, indicates that for the current 2017-18 winter season, the projected design day demands of Chesapeake's customers are 90,363 Dth. For the 2018-19 winter season, projected design day demands are 93,781 Dth.

**Q. BRIEFLY DESCRIBE HOW CHESAPEAKE DEVELOPED ITS DESIGN DAY DEMAND PROJECTIONS.**

A. The Company's first step in developing its design day demand projections was to perform a linear regression analysis of customer demands and HDDs for the winter of 2014-15. This analysis identified the extent to which customer demands were affected by changes in HDDs. This regression analysis was then used to determine customer demands at 60 HDD, which is the Company's design day. A standard error

term reflecting a 95 percent confidence interval was included to arrive at the Company's final design day demand estimate for the winter of 2014-15. For the winters of 2017-18 and 2018-19, the final design day demand estimate for the winter of 2014-15 was adjusted to reflect customer growth that had occurred since the winter of 2014-15.

**Q. HOW DO THE COMPANY'S DESIGN DAY DEMAND PROJECTIONS COMPARE WITH THE CAPACITY RESOURCES CHESAPEAKE HAS ACQUIRED TO MEET THOSE DEMANDS?**

A. As shown on Schedule JDM-1, the Company's design day capacity resources exceed projected demands by 307 Dth for winter of 2017-18, or less than 1 percent. For the winter of 2018-19, projected design day capacity resources exceed projected demands by 4,662 Dth, or 5 percent. I would note that the Company's on-system peak shaving capacity resources are lower for the winter of 2018-19 than 2017-18 due to projected retirement of one of the Company's three on-system propane facilities. Without this retirement, design day resources would exceed demands by 10,889 Dth, or 12 percent. I discuss the retirement of the Company's propane facility later in this section of my testimony.

**Q. HAVE YOU EVALUATED THE REASONABLENESS OF THE COMPANY'S DESIGN DAY DEMAND PROJECTIONS?**

A. Yes. On January 9, 2017, the peak day during the 2016-17 winter season, customer demands totaled 63,853 Dth, and 47 HDDs were recorded. Based on the heat sensitive usage of customers experienced on this day, if a 60 HDD design day had been experienced, customer demands would have been 77,957 Dth (See the response to PSC-DPA-67). This is 7,902 Dth, or 9 percent, less than projected design day demands for the winter of 2016-17.

I also performed a regression analysis of customer demands and HDDs for December 2017, which was the most recent data available to me. During this month, 907 HDDs were recorded. My analysis indicated design day demands of 83,177 Dth for the winter of 2017-18, inclusive of a 95 percent confidence interval. This is 7,186 Dth, or 8 percent, less than the Company's projection.

**Q. HAVE YOU DETERMINED WHY THE COMPANY'S DESIGN DAY DEMAND PROJECTIONS APPEAR TO EXCEED ACTUAL AND RECENT EXPERIENCE?**

A. No. However, I believe it could be due to the Company's failing to account for customer conservation efforts and energy efficiency gains that have occurred since the winter of 2014-15. It could also be attributable to the Company overestimating the demands of new customer additions.

**Q. EARLIER IN YOUR TESTIMONY YOU DISCUSSED THE RETIREMENT OF ONE OF THE COMPANY'S ON-SYSTEM PROPANE FACILITIES. DO THE COMPANY'S GSR APPLICATION OR ITS 2017 LONG-TERM GAS SUPPLY AND DEMAND STRATEGIC PLAN DISCUSS THE REASONS FOR RETIRING THIS FACILITY?**

A. Not that I am aware. The impact of this retirement on Chesapeake's design day capacity resources can be seen in the decline of On-System Peak Shaving resources identified on Schedule JDM-1 from 12,141 Dth for the winter of 2017-18 to 5,914 Dth for the winter of 2018-19 and beyond.

**Q. HAS THE COMPANY JUSTIFIED THE RETIREMENT OF ONE OF ITS PROPANE FACILITIES?**

A. No, it has not.

**Q. WHAT EFFECT WILL THE RETIREMENT OF THIS FACILITY HAVE ON CHESAPEAKE'S GAS SUPPLY COSTS?**

A. Retirement of this facility would result in a significant increase in Chesapeake's gas supply costs.

**Q. WHAT DO YOU RECOMMEND WITH RESPECT TO THE POTENTIAL RETIREMENT OF ONE OF CHESAPEAKE'S PROPANE FACILITIES?**

A. I recommend that the facility not be retired unless the Company can demonstrate that the retirement of the facility is in the best interest of ratepayers, and the Company receives Commission approval to do so.

**Q. WHAT DO YOU RECOMMEND WITH RESPECT TO CHESAPEAKE'S DESIGN DAY FORECASTING AND CAPACITY ACQUISITION PLANS?**

A. As shown on Schedule JDM-1, beginning with the winter of 2019-20, Chesapeake plans on acquiring an additional 4,000 Dth/day of ESNG capacity per year. Those acquisitions can only be justified if the Company's current design day demand projections are reasonable, and if retirement of one of the Company's propane facilities is justified. The Company's current design day demand projections have not been shown to be reasonable, and retirement of one of its propane facilities has not been justified. Therefore, I recommend that Chesapeake not acquire any additional ESNG capacity until it is authorized to do so by the Commission. To obtain this authorization, the Company should re-evaluate its design day demand forecasting procedures, modify those procedures as appropriate, and demonstrate that its design day demand forecasts are reasonable. In addition, the Company would need to demonstrate that retirement of one of its propane facilities was justified.

**Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

A. Yes, it does.

**BEFORE THE PUBLIC SERVICE COMMISSION**

**OF THE STATE OF DELAWARE**

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| **IN THE MATTER OF THE APPLICATION OF CHESAPEAKE UTILITIES CORPORATION FOR APPROVAL OF A CHANGE IN ITS GAS SALES SERVICE RATES ("GSR") TO BE EFFECTIVE NOVEMBER 1, 2017 (FILED SEPTEMBER 1, 2017)** | **)** | **PSC DOCKET NO. 17-1021** |

# SCHEDULE ACCOMPANYING THE DIRECT TESTIMONY OF

# JEROME D. MIERZWA

## ON BEHALF OF THE

## STAFF OF THE DELAWARE PUBLIC SERVICE COMMISSION AND DIVISION OF THE PUBLIC ADVOCATE

**February 28, 2018**

EXETER
ASSOCIATES, INC.
10480 Little Patuxent Parkway, Suite 300
Columbia, Maryland 21044

**Table 1**
**Chesapeake Utilities Corporation**
DELAWARE DIVISION
**Design Day**
**Design Summary - Capacity & Deliverability**
**(Dt's/Day)**

| | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 |
|---|---|---|---|---|---|
| **Design Day Requirements (Mcf)** | 87,307 | 90,610 | 94,853 | 99,362 | 103,076 |
| **Design Day Requirements (Dt)** | 90,363 | 93,781 | 98,173 | 102,840 | 106,684 |
| ***DELIVERABILITY - ESNG CAPACITY*** | | | | | |
| **ESNG - Transportation** | 73,448 | 73,448 | 87,448 | 91,448 | 95,448 |
| **ESNG - Storage Transportation** | 5,081 | 5,081 | 5,081 | 5,081 | 5,081 |
| **Subtotal Direct Pipeline Capacity** | 78,529 | 78,529 | 92,529 | 96,529 | 100,529 |
| **RESERVE / (DEFICIENCY) Direct Pipeline Capacity** | **(11,834)** | **(15,252)** | **(5,644)** | **(6,311)** | **(6,155)** |
| **On-System Peak Shaving** | 12,141 | 5,914 | 5,914 | 5,914 | 5,914 |
| **Subtotal Reserve / (Deficiency)** | **307** | **(9,338)** | **270** | **(397)** | **(241)** |
| **Capacity Additions - Projected (cumulative)** | **0** | **14,000** | **4,000** | **4,000** | **4,000** |
| **Reserve / (Deficiency)** | **307** | **4,662** | **4,270** | **3,603** | **3,759** |
| **Design Day Requirements** | 90,363 | 93,781 | 98,173 | 102,840 | 106,684 |
| **Transportation Customer Supply (DCQ)** | (17,123) | (17,123) | (17,123) | (17,123) | (17,123) |
| **Sales Customer's Design Day Requirements** | 73,240 | 76,658 | 81,050 | 85,717 | 89,561 |
| ***DELIVERABILITY - CAPACITY UPSTREAM OF ESNG*** | | | | | |
| **Transco** | 24,658 | 24,658 | 24,658 | 24,658 | 24,658 |
| **Columbia** | 19,184 | 19,184 | 19,184 | 19,184 | 19,184 |
| **Texas Eastern** | 34,100 | 34,100 | 34,100 | 34,100 | 34,100 |
| **Subtotal Upstream Deliverability** | 77,942 | 77,942 | 77,942 | 77,942 | 77,942 |
| **Reserve / (Deficiency) Upstream Deliverability** | **4,702** | **1,284** | **(3,108)** | **(7,775)** | **(11,619)** |
| **Bundled Supply or Capacity Additions** | 0 | 0 | 3,108 | 7,775 | 11,619 |