

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. W-354, SUB 412

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	
Application by Carolina Water Service, Inc. of North Carolina, along with Corix Infrastructure (US) Inc. and SW Merger Acquisition Corp., for Approval of a Business Combination Transaction) DIRECT TESTIMONY OF ELLEN LAPSON ON BEHALF OF JOINT APPLICANTS

Direct Testimony of

Ellen Lapson

on behalf of

JOINT APPLICANTS

November 23, 2022

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

<u>Acronym/Defined Term</u>	<u>Meaning</u>
BCI	British Columbia Investment Management Corporation. BCI manages assets for clients that include British Columbia public pension funds, insurance reserves and trust funds.
CII	Corix Infrastructure Inc. As of the closing of the Proposed Transaction, CII and an affiliate or affiliates, each directly or indirectly controlled by BCI, will own 50% of the outstanding stock issued by Corix US.
Corix US	Corix Infrastructure (US) Inc. Prior to the Proposed Transaction, Corix US is a subsidiary of CII; after the Proposed Transaction, Corix US is the parent of Intermediate Newco.
Commission or NCUC	North Carolina Utilities Commission.
CRU US	Corix Regulated Utilities (US) Inc. CRU US owns 100% of the outstanding stock issued by CWSNC.
EBITDA	Earnings before Interest Expense, Income Tax, Depreciation and Amortization, a measure of cash flow.
FFO	Funds from Operations, calculated by S&P as EBITDA less cash interest paid and less cash tax paid.
IIF	Infrastructure Investments Fund. A private, open-ended investment vehicle, focused on long-term critical infrastructure assets.
IIF Subway	IIF Subway Investment LP. Owns 75% of the outstanding stock issued by SWMAC. Bazos CIV, L.P. ("Bazos") owns the remaining 25% of SWMAC's stock. Bazos is indirectly owned by the German reinsurer, Munich RE (Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München). As of the closing of the Proposed Transaction, a to-be-formed subsidiary of IIF Subway and Bazos, SWMAC Holdco, will own 50% of the outstanding stock issued by Corix US.

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<u>Acronym/Defined Term</u>	<u>Meaning</u>
Intermediate Newco	An entity that will be formed for the sole purpose of owning all the water and wastewater businesses previously owned by CII and SouthWest. It will be directly owned by Corix US.
Joint Applicants	Carolina Water Service, Inc. of North Carolina, Corix Infrastructure (US) Inc., and SW Merger Acquisition Corp.
Moody's	Moody's Investors Service
Proposed Transaction	Proposed combination of water, wastewater, and certain related holdings owned by Corix and Corix US with the holdings of SouthWest.
S&P	Standard & Poor's Ratings or S&P Global Ratings
SWMAC	SW Merger Acquisition Corp.
SWMAC Holdco	A to-be-formed entity that will be owned 75% by IIF Subway, with the remaining 25% owned by Bazos. As of the closing of the Proposed Transaction, SWMAC Holdco will own 50% of the outstanding stock issued by Corix US.
SouthWest	SouthWest Water Company
Utility	Carolina Water Service, Inc. of North Carolina (also "CWSNC")

1 **I. WITNESS INTRODUCTION AND BACKGROUND**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Ellen Lapson, CFA. My business address is 370 Riverside
4 Drive, New York, New York 10025.

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A. I am the founder and principal of Lapson Advisory, a private company that
7 is a division of Trade Resources Analytics, LLC. Through Lapson Advisory,
8 I provide independent consulting services relating to the financial strength
9 of utilities and infrastructure companies. I advise client companies on
10 access to capital and debt markets. I frequently testify as an expert witness
11 relating to utility finance and utility capital market matters, including utility
12 merger transactions.

13 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL AND**
14 **PROFESSIONAL EXPERIENCE.**

15 A. I am a Chartered Financial Analyst (“CFA”) and earned a Master of
16 Business Administration from New York University Stern School of
17 Business with a specialization in accounting. I have worked in the capital
18 markets space with particular focus on financing or analyzing the finances
19 of regulated public utilities for the past 50 years. The list of my professional
20 qualifications appears in Exhibit EL-1.

21 **Q. ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

1 A. I am appearing on behalf of the Joint Applicants in an application regarding
2 a proposed business combination transaction.

3 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS OR OTHER**
4 **UTILITY REGULATORY COMMISSIONS?**

5 A. Yes, I have previously testified as a financial expert in 13 state jurisdictions¹,
6 at the Federal Energy Regulatory Commission, and in US District Court as
7 summarized in Exhibit EL-1.

8 **Q. WHAT IS THE BASIS FOR YOUR EXPERTISE IN MATTERS RELATING**
9 **TO UTILITY MERGERS AND BUSINESS COMBINATIONS?**

10 A. Before I founded Lapson Advisory in 2012, I was a Senior Director and then
11 a Managing Director at Fitch Ratings (“Fitch”), one of the three prominent
12 credit rating agencies in the U.S. market. My team established and
13 maintained the credit ratings of investor-owned electric, gas, and water
14 utilities. For 17 years at Fitch, I performed credit evaluations and
15 supervised other analysts to rate hundreds of electric, gas, and water
16 utilities. Also, I supervised and wrote the credit rating methodologies
17 applied to companies in the investor-owned electric, gas, and water sector.
18 While at the credit rating agency, I was a member and then the chair of the
19 Criteria Committee that oversaw Fitch’s global corporate rating criteria,

¹ Arkansas, Colorado, Delaware, District of Columbia, Hawaii, Illinois, Maryland, Massachusetts, New Jersey, New Mexico, New York, South Carolina, Texas.

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1 including its policies on the credit effects of corporate structure. I closely
2 studied the credit criteria and polices of the two other large credit rating
3 agencies, Moody's and S&P.

4 Prior to joining Fitch, I was employed for 20 years from 1974 to 1994
5 in commercial banking and investment banking at Chemical Bank, a
6 predecessor of JP Morgan Chase. In banking, I specialized in structuring
7 financial transactions for regulated utilities, utility holding companies, and
8 project-financed energy and natural resource projects, sometimes including
9 bankruptcy-remote special purpose funding entities, partnership structures,
10 and limited liability companies.

11 Since founding Lapson Advisory, I have served as an expert witness
12 in regulatory proceedings involving the merger applications of several large
13 electric or gas utilities on the financial aspects of the transaction and
14 proposed corporate structure and governance upon a utility's future viability
15 and financial strength.

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

18 A. I am testifying as a financial expert on behalf of the Joint Applicants
19 regarding the future financial strength and suitability of Intermediate Newco
20 as the parent of its water and wastewater utility subsidiaries. I also testify
21 regarding the expected impact of the Proposed Transaction upon CWSNC's

1 future access to equity capital. In my view, the Proposed Transaction will
2 have no adverse financial effect on CWSNC and will have favorable
3 financial impact upon CWSNC and its customers by enhancing the Utility's
4 access to capital.

5 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

6 A. The remainder of my testimony is comprised of the following sections:

7 II. Executive Summary and Conclusions

8 III. Transaction Impact on the Utility's Financial Strength

9 A. Current Ownership and Financial Circumstances

10 B. Impact of the Transaction on Utility's Access to Equity

11 Capital

12 C. Transaction Impact on Access to Debt Capital and Credit by

13 Intermediate Newco and the Consolidated Group

14 IV. Conclusion and Recommendations

15 **II. EXECUTIVE SUMMARY AND CONCLUSIONS**

16 **Q. PLEASE SUMMARIZE YOUR TESTIMONY AND CONCLUSIONS.**

17 A. I have reviewed the financial aspects of the Proposed Transaction with a
18 focus upon how the change in the indirect ownership of CWSNC as a result
19 of the Proposed Transaction will affect CWSNC's ability to carry out its
20 regulated water and wastewater business for the benefit of customers.

1 Water service is one of the most capital-intensive industrial sectors.
2 CWSNC must make ongoing capital investments in facilities to connect new
3 customers, access water supplies, and update its assets. To fund its capital
4 expenditures, CWSNC needs access to equity and debt capital.

5 In the testimony that follows, I conduct four distinct analyses. First, I
6 review the pro forma financial statements of the proposed Intermediate
7 Newco. My analysis shows that the pro forma financial condition of
8 Intermediate Newco is similar to the current financial status of the CII water,
9 wastewater and related businesses.

10 Second, I review the likely effect of the change in owners upon
11 CWSNC's access to capital. As an indirect subsidiary of Intermediate
12 Newco, CWSNC will have access to equity capital funding superior to that
13 which it now has as an indirect subsidiary of CII and direct subsidiary of
14 Corix Regulated Utilities (US) Inc. ("CRU US"). The owners of Intermediate
15 Newco will include two complementary sets of private investors which
16 together represent a very large funding pool committed to investing in
17 essential infrastructure assets. BCI and IIF each manages funds on behalf
18 of major investors with a long-term orientation, such as public pension
19 funds.

20 Third, I review the continuing ability of CWSNC's direct parent, CRU
21 US, to access the debt capital market to issue its long-term bonds and to

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1 obtain bank credit facilities. The Proposed Transaction will not disrupt CRU
2 US's ongoing access to debt funding from the debt capital market and bank
3 credit facilities, which should continue in the same manner as currently.
4 Both CRU US and CWSNC may benefit from the increased scale of
5 Intermediate Newco and the addition of the strong relationships that IIF
6 Subway and SWMAC have with the lending community. CRU US, and
7 therefore CWSNC, will not only have access to the same sources of debt
8 capital as it does today, but it may receive additional attention and
9 consideration from fixed income sources that have relationships with IIF
10 Subway and SWMAC.

11 Finally, after the consummation of the Proposed Transaction, there
12 are potential benefits in the form of future cost savings for CWSNC due to
13 the increased scale of the combined enterprise. Even though the
14 transaction is not driven by net financial synergies, management expects
15 scale and integration to yield financial benefits over time, which is likely to
16 produce future benefits for CWSNC and its customers.

17 Therefore, I conclude that there is no possibility of any harm to
18 CWSNC or its customers as a consequence of the Proposed Transaction,
19 and in fact Intermediate Newco will have superior capability to supply equity
20 capital to CWSNC for the Utility's future capital improvements.

1 **III. TRANSACTION IMPACT ON THE UTILITY'S FINANCIAL STRENGTH**

2 **A. Current Ownership and Financial Circumstances**

3 **Q. PLEASE DESCRIBE CWSNC'S CURRENT OWNERSHIP AND ITS**
4 **OWNERSHIP AFTER THE PROPOSED TRANSACTION IS EFFECTIVE.**

5 A. CWSNC is an indirect subsidiary of Corix US, which in turn is a direct
6 subsidiary of CII. BCI indirectly controls CII. At the conclusion of the
7 Proposed Transaction, CWSNC will be an indirect subsidiary of
8 Intermediate Newco.

9 **Q. AFTER THE CONSUMMATION OF THE PROPOSED TRANSACTION,**
10 **WILL CWSNC'S NEW INDIRECT PARENT HAVE A SOUND FINANCIAL**
11 **CONDITION?**

12 A. Yes. The new indirect parent for all of the system water utilities will be
13 Intermediate Newco. Intermediate Newco will have the benefit of greater
14 size than either CII's water, wastewater and related businesses or
15 SouthWest and will have credit characteristics that are consistent with those
16 of investment grade rated peer companies in the water and wastewater
17 industry.

18 **Q. UPON WHAT DO YOU BASE YOUR CONCLUSIONS?**

19 A. I reviewed the pro forma 2021 financial statements of Intermediate Newco
20 prepared by sponsor companies SouthWest and CII. The pro forma income
21 statement and balance sheet illustrate that the combined company will be

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1 approximately double the size of the CII water, wastewater and related
 2 businesses that are part of the business combination, as shown in Table 2
 3 below. Increased size and scale will give Intermediate Newco greater
 4 diversity (e.g., diverse geography, climate, and regulatory jurisdictions),
 5 which investors view as a favorable qualitative characteristic.

Table 2: Size of Intermediate Newco Relative to Current SouthWest and Corix
 (US \$, 000)

	Corix (a)	SouthWest	Intermediate Newco	Relative Size (b)	Relative Size (c)
Operating revenues	273,988	248,906	522,894	2.1	1.9
Operating income	51,331	58,551	109,882	1.9	2.1
Net income	24,265	23,662	47,927	2.0	2.0
Property, Plant & Equipmt.					
Net of Depreciation	1,112,073	768,340	1,880,413	2.4	1.7
Long-Term Capital	818,942	1,116,044	1,934,986	1.7	2.4

a. Adjusted to eliminate Corix businesses not included in the business combination.

b. Intermediate Newco divided by SouthWest; c. Divided by original Corix.

6
 7 Second, I compared the pro forma financial ratios of Intermediate
 8 Newco relative to the key financial credit ratios of peer water companies
 9 that have investment grade credit ratings. Table 3 compares Intermediate
 10 Newco with two companies, Essential Utilities and SJW Group, both rated
 11 in the investment grade category by S&P. I compared Intermediate Newco
 12 to water companies with S&P ratings because S&P rates more companies
 13 in the water and wastewater sector than any other credit rating agency. I
 14 matched Intermediate Newco's key financial credit ratios with those of these

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1 two peer companies; all three companies have key credit ratios that are in
 2 a comparable range. This analysis confirms my view that Intermediate
 3 Newco will have financial ratios and credit characteristics that are consistent
 4 with those of investment grade-rated water utility peers.

Table 3: Intermediate Newco Compared to Peer Water Companies

Period	Intermediate	Essential	SJW Group
	Newco	Utilities	
	12/31/21 PF	12/31/2020(a)	12/31/2020 (b)
RATIOS			
FFO to Debt	10.2%	9.1%	8.4%
Debt to EBITDA	6.8	8.2	7.7
FFO interest coverage	3.4	4.0	3.1
EBITDA Margin	35.2%	48.4%	37.7%

Notes: PF = Pro Forma

a. Source: S&P Global Ratings Direct, "Essential Utilities", Feb. 3, 2022

b. Source: S&P Global Ratings Direct, "SJW Group", Nov. 23, 2021

5
 6 **Q. WHAT IS CWSNC'S CURRENT FINANCIAL CONDITION?**

7 A. CWSNC is a corporation that is in good standing. CRU US also is a
 8 corporation that is in good standing. It is solvent and financially sound, and
 9 not in default of any credit agreements or notes.

10 **Q. WHAT ARE CWSNC'S CURRENT SOURCES OF EQUITY CAPITAL?**

11 A. CWSNC's two sources of equity are retained earnings and equity
 12 contributions from CRU US. CRU US in turn raises equity through its
 13 relationship with CII and, ultimately, its relationship with BCI.

14 **Q. UNDER ITS CURRENT OWNERSHIP, WHAT ARE CWSNC'S SOURCES**
 15 **OF DEBT CAPITAL AND CREDIT?**

1 A. CRU US raises debt capital by means of the issuance of long-term collateral
2 trust notes in the private placement market. CRU US currently has \$326
3 million of such debt outstanding. In addition, CRU US has a delayed draw
4 term loan in the amount of \$75 million, with \$50 million outstanding (and
5 \$25 million available). CRU US also has a bank credit agreement and may
6 borrow up to \$80 million under that agreement.

7 **B. Impact of the Transaction on the Utility's Access to Equity**
8 **Capital**

9 **Q. HOW WILL CWSNC FULFILL ITS NEEDS FOR EQUITY CAPITAL**
10 **AFTER THE PROPOSED TRANSACTION?**

11 A. If new equity is needed to fund capital investment, the indirect co-owners
12 SWMAC Holdco and CII (and an affiliate or affiliates) would likely be able to
13 obtain infusions of equity to invest in their indirect subsidiary from IIF
14 Subway and Bazos and investments managed by BCI. The Proposed
15 Transaction increases and diversifies the base of equity upon which
16 CWSNC can draw in the future relative to the current sources of equity
17 funding.

18 **Q. PLEASE DESCRIBE THE ROLE OF BCI AND IIF WITHIN THE CAPITAL**
19 **MARKET.**

20 A. BCI is a highly regarded investment management company founded in
21 1999. BCI is a statutory corporation created by the Public Sector Pension

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1 Plans Act (British Columbia) for the purpose of providing investment
2 management services to British Columbia's public sector. BCI manages
3 approximately \$211 billion (CAD) of assets on behalf of its clients, which
4 include 11 public sector pension plans, three insurance funds and various
5 special purpose funds. The public sector pension funds include public
6 sector employees such as teachers, municipal and provincial employees.
7 Through its infrastructure and renewable resources program, BCI seeks
8 long-term, stable investments around the world in regulated utilities,
9 transportation, telecommunications, and other infrastructure-based
10 industries. The BCI infrastructure and renewable resources program has
11 made net new investments in utility and infrastructure assets in the past five
12 years of approximately \$4.2 billion (CAD).

13 IIF is an approximately \$26 billion² open-ended private investment
14 vehicle focused on investing in critical infrastructure assets. It is responsible
15 for investing and growing the retirement money of more than 60 million
16 families. IIF is a long-term owner of companies that provide essential
17 services, including water, natural gas and electric utility services, renewable
18 energy, and transportation infrastructure, which are all vital to the
19 communities in which they operate. As of June 30, 2022, IIF owned 20
20 companies throughout North America, Europe, and Australia. Since

² As of June 30, 2022.

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1 acquiring SouthWest in 2010, IIF has supported over \$500 million in capital
2 expenditures for critical infrastructure for SouthWest's water and
3 wastewater businesses.

4 In summary, these owners are well respected entities within the
5 capital markets. The objectives and investment styles of the IIF and BCI
6 investors are in harmony, with a strong emphasis on long-term, stable, and
7 low-volatility investment.

8 **Q. DO YOU SEE ANY BENEFITS FOR CWSNC FROM THE GREATER SIZE**
9 **OF THE COMBINED INTERMEDIATE NEWCO AND FROM OWNERSHIP**
10 **BY IIF SUBWAY IN ADDITION TO BCI?**

11 A. Yes. Small water utilities suffer a disadvantage attracting the attention of,
12 and raising capital in, the equity market. Private investors such as IIF and
13 BCI are ideally suited to supply common equity to CWSNC if equity is
14 needed for future capital expenditures.

15 There is very little if any overlap between the investors in IIF and the
16 BCI investor group, so joining these two sets of investors as equity sponsors
17 will expand the pool of equity capital from which Intermediate Newco's utility
18 subsidiaries may receive equity infusions when they are needed.

19 Also, there may be scale benefits for CWSNC from association with
20 a larger enterprise, such as more attention from debt lenders and credit
21 providers, as I will discuss below. Furthermore, the IIF and BCI portfolio

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1 companies involved in the Proposed Transaction have management
2 expertise and strong relationships throughout the water and utility industry.
3 This combination will broaden the network of professionals to share best
4 practices on important priorities such as health and safety, cybersecurity,
5 operational excellence, and other areas of shared interest.

6 **C. Transaction Impact on Access to Debt Capital and Credit by**
7 **Intermediate Newco and the Consolidated Group**

8 **Q. WILL THERE BE ANY ADVERSE EFFECT ON INTERMEDIATE**
9 **NEWCO'S ACCESS TO DEBT OR CREDIT DUE TO THE PROPOSED**
10 **TRANSACTION?**

11 A. Quite the contrary. Going forward, Intermediate Newco should have access
12 to a broader and more diverse group of lenders than at present. For
13 example, there are currently 23 major private placement lenders that invest
14 in bonds of Corix or SouthWest-affiliated companies. Only three of those
15 private placement lenders currently are lenders to both groups, indicating
16 only a 13% overlap among the lender groups. Moreover, CRU US should
17 be able to issue private placement bonds, in the same manner as in the
18 past and, similar to Intermediate Newco, it may benefit from an expansion
19 of the field of interested bond investors. The business combination thus will
20 result in a significant expansion of the potential lenders that have current
21 relationships.

1 **Q. WILL INTERMEDIATE NEWCO OBTAIN PUBLIC CREDIT RATINGS**
2 **AFTER THE PROPOSED TRANSACTION?**

3 A. Not in the near term. I am not aware of any plans by management to seek
4 public credit ratings at this time. In the future, Intermediate Newco may
5 consider the economic costs of obtaining and maintaining a public rating
6 versus any market benefits of obtaining such rating or ratings. Going
7 forward, Intermediate Newco's needs could be fulfilled with private
8 placement funding that may not require a public credit rating and with a
9 multi-year bank credit facility. However, as noted in the Application, it is
10 intended that Intermediate Newco will be established and operated in a
11 manner that that is consistent with that of investment grade entities in the
12 water utility industry.

13 **Q. HAS THE APPLICANT MADE ANY COMMITMENTS REGARDING ITS**
14 **FUTURE FINANCIAL PRACTICES AND POLICIES TO PROTECT THE**
15 **UTILITY'S FINANCIAL WELL-BEING?**

16 A. Yes. A complete set of these commitments can be found in the Application.

17 **IV. CONCLUSION AND RECOMMENDATIONS**

18 **Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.**

19 A. The Proposed Transaction creates no new risks to CWSNC or to its
20 customers. After the closing, CWSNC will have superior access to common
21 equity funding via ownership by BCI plus IIF Subway relative to the current

1 situation with ownership by BCI alone. Furthermore, going forward CWSNC
2 will have comparable access to the debt capital market and either similar or
3 superior access to bank credit relative to its current situation as a subsidiary
4 of CII.

5 Also, there are potential benefits in the form of future cost savings
6 for CWSNC due to the doubling of scale of the combined enterprise. I also
7 understand that, even though the transaction is not driven by net financial
8 synergies, management expects scale and integration to yield financial
9 benefits over time. Based on the approximately doubled size of the
10 combined entities, management's intention to lower costs in overhead
11 categories and shared services seems quite reasonable, in my professional
12 opinion.

13 Therefore, I recommend that the Commission approve the Proposed
14 Transaction.

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

16 **A.** Yes, it does.

EXPERIENCE AND QUALIFICATIONS**ELLEN LAPSON, CFA**

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LAPSON ADVISORY: Financial Consulting. Expert Testimony. Financial Training.

SUMMARY

Expert on financing utilities and infrastructure projects, with over 50 years of professional MBA Accounting and finance, NYU Stern School of Business; Chartered Financial Analyst

EMPLOYMENT HISTORY

Lapson Advisory, Trade Resources Analytics	Financial consulting services to utilities and infrastructure project developers. Financial strategy and credit advisory; expert financial witness.	2012 to present
Fitch Ratings Utilities, Power & Gas Managing Director; Senior Director	Manager or primary analyst on credit ratings of over 200 utility, pipeline, and power generation companies and utility tariff securitizations. Chaired rating committees for energy, utility, and project finance committees. Liaison with major fixed income investors.	1994 - 2011
JP Morgan Chase (formerly Chemical NY Corp.) Vice President, 1975-94 Asst. Vice President, 1974-75	Managed financial advisory transactions, structured debt placements, syndicated credit facilities for utilities, mining and metals, project finance. First of its kind stranded cost securitization for Puget Sound P&L, 1992-94. Led financings for utilities in bankruptcy or reorganizations. Divisional controller, 1981-86.	1974-1994
Argus Research Corp. Equity Analyst, Utilities	Equity analysis of U.S. electric and gas utilities, natural gas pipelines, regulated telephone companies. Research coverage and reports; forecasts and models.	1969-1974

EDUCATION & PROFESSIONAL ORGANIZATIONS

Stern School of Business, New York University, MBA. Accounting major; Finance minor	1975
Barnard College, Columbia University, BA. Earned CFA Institute Charter, 1978	1969
Institute of Chartered Financial Analysts	Since 1978
Wall Street Utility Group	Since 1996

ADVISORY COUNCILS AND BOARD SERVICE

Electric Power Research Institute, Advisory Council, 2004-2011; Chair, 2009 and 2010.
MIT Energy Institute, External Advisory Council, The Future of Solar Energy, 2012-2014.
Represented U.S. fixed income investors in responding to proposed financial accounting rules for rate-regulated utilities by the International Accounting Standards Board (IASB) at a panel sponsored by Edison Electric Institute and American Gas Assoc., December, 2014.

EXPERT TESTIMONY

Jurisdiction	Proceeding	Topic
Federal Energy Regulatory Commission	Docket No. ER22-2379, Southwest Power Pool, Inc., supporting Southwestern Public Service Co.'s right under Generator Interconnection Agreement (2022)	Application by a transmission owner to fund investment in Network Upgrades
Federal Energy Regulatory Commission	Docket No. ER22-2274, Southwest Power Pool, Inc., supporting Southwestern Public Service Co.'s right under Generator Interconnection Agreement (2022)	Application by a transmission owner to fund investment in Network Upgrades
Massachusetts Department of Public Utilities	DPU Docket No. 22-70, 22-71, 22-72; Long-term purchase contracts for offshore wind energy by Eversource, National Grid, Unitil (2022)	Remuneration to distribution utilities for entering into long-term supply contracts
New Jersey Board of Public Utilities	BPU Docket No. GM 2204, Merger Application of South Jersey Industries, Inc. and Boardwalk Merger Sub, Inc. on behalf of Joint Applicants (2022)	Financial strength in the context of merger proceeding and appropriate corporate commitments.
Public Utilities Commission Texas	Docket No. 53601, Application of Oncor Electric Delivery LLC to Change Rates, on behalf of Oncor. (2022)	Financial strength and appropriate capital structure.
Public Utilities Commission Texas	Docket No. 52487, Application of Entergy Texas to Alter its CCN for Orange County Advanced Power Station, on behalf of Entergy Texas, Inc. (2022)	Impact of a power purchase contract on the balance sheet, financial ratios, and credit ratings of the utility purchaser.
Federal Energy Regulatory Commission	Docket No. ER21-2282, Application re Open Access Transmission Tariff, on behalf of PJM Transmission Owners (2022)	Application by Transmission Owners to invest in Network Upgrades
Federal Energy Regulatory Commission	Docket No. EL-20-72, LA Public Service Comm. et al. vs. System Energy Resources, Inc. on behalf of SERI (2022)	Financial impact of the termination of a support agreement; capital structure.
Federal Energy Regulatory Commission	Docket No. RM20-10-000, Electric Transmission Incentive Policy, on behalf of PJM Transmission Owners (2021)	In support of financial incentives for RTO membership
Public Utilities Commission of Colorado	Proceeding No. No. 21R-0314G, NOPR on Purchased Gas Cost Adjustment on behalf of Public Service Company of CO (2021)	Investor and credit rating impact of proposed gas cost recovery rules
New Mexico Public Regulation Commission	Docket No 20-00222-UT, Application of Public Service Co. of NM, PNM Resources, Avangrid Inc., and NM Green Resources on behalf of Applicants (2020-21)	Financial strength and resilience in the context of merger proceeding

Jurisdiction	Proceeding	Topic
Public Utilities Commission Texas	Docket No 51547, Application of Texas-New Mexico Power Co., Avangrid Inc., and NM Green Resources on behalf of the Joint Applicants (2020-21)	Financial strength and resilience in the context of merger proceeding
Massachusetts Department of Public Utilities	DPU 20-16, 20-17, and 20-18, Long-term purchase contract for offshore wind energy, Eversource, National Grid, Unitil (2020)	Remuneration to utilities for entering into long-term contracts
Public Utilities Commission Texas	Docket No. 49849, Joint Application of El Paso Electric, Sun Jupiter Holdings and IIF US Holding 2 to acquire El Paso Electric... (2019-20)	Conditions & commitments for utility merger and formation of holdco; financial strength
New Mexico Public Regulation Commission	Docket No. 19-00234 UT, Joint Application of El Paso Electric, Sun Jupiter Holdings, and IIF US Holding 2 to acquire El Paso Electric (2019-20)	Conditions & commitments for utility merger and formation of holdco; financial strength
Public Utilities Commission of Colorado	Proceeding No. 19AL-0268E, Filing to Revise Electric Tariff, on behalf of Xcel Public Service Co, of Colorado (2019)	Capital structure and cash flow measures
Public Utilities Commission Texas	Docket No. 49421, Application of CenterPoint Energy Houston to change rates, on behalf of CEHE (2019)	Separateness commitments in the context of a rate proceeding; financial strength
Public Utilities Commission Texas	Docket No. 48929, Application of Oncor Electric Delivery Co. LLC, Sharyland Utilities LP, and Sempra Energy, on behalf of Sharyland Utilities (2019)	Appropriate governance conditions and commitments for partner ownership of an electric transmission utility
Public Utilities Commission of Colorado	Proceeding No. 17AL-0363G, Filing to Revise Gas Tariff, on behalf of Xcel Public Service Co, of Colorado (2018)	Cash flow and credit impacts of tax reform; capital structure
South Carolina Public Service Commission	Docket No. 2017-370-E; Joint Application for Merger and for Prudency Determination, on behalf of South Carolina Electric & Gas Company (2018)	Benefits of merger and proposed rate plan; impact on cash flow and access to capital.
U.S. Federal District Court, District of SC	Civil Action No.: 3:18-cv-01795-JMC, Motion for Preliminary Injunction, on behalf of South Carolina Electric & Gas	Financial harm of rate cut compliant with Act
Public Utilities Commission Texas	Docket No. 48401, Texas-New Mexico Power Co. Application to Change Retail Rates, on behalf of TNMP (2018)	Cash flow and credit impacts of tax reform
Public Utilities Commission Texas	Docket No. 48371, Entergy Texas Inc., Application to Change Retail Rates, on behalf of ETI (2018)	Cash flow and credit impacts of tax reform

Jurisdiction	Proceeding	Topic
Public Utilities Commission Texas	Docket No. 47527, Southwestern Public Service Co. Application for Retail Rates, on behalf of SPS Co. (2018)	Adverse cash flow and credit impacts of tax reform; cap structure
New Mexico Public Regulation Commission	Case No. 17-00255-UT, Southwestern Public Service Co. Application for Retail Rates, on behalf of SPS Co. 2018)	Adverse cash flow and credit impacts of tax reform; cap structure
South Carolina Public Service Commission	Docket No. 2017-305-E, Response to ORS Request for Rate Relief, on behalf of S. Carolina Electric and Gas (2017)	Adverse financial implications of rate reduction sought by ORS
DC Public Service Commission	Formal Case No. 1142, Merger Application of AltaGas Ltd. and Washington Gas Light, Inc. (2017)	Financial strength; Conditions and commitments in a utility merger
Public Service Commission of Maryland	Docket No. 9449, In the Matter of the Merger of AltaGas Ltd. and Washington Gas Light, Inc. (2017)	Financial strength; Conditions and commitments in a utility merger
Public Utilities Commission Texas	Docket No. 46957, Application of Oncor Electric Delivery LLC to Change Rates, on behalf of Oncor. (2017)	Appropriate capital structure. Financial strength.
Public Utilities Commission Texas	Docket No. 46416, Application of Entergy Texas, Inc. for a Certificate of Convenience & Necessity, on behalf of Entergy Texas (2016-2017)	Debt equivalence and capital cost associated with capacity purchase obligations (PPA)
U.S. Federal Energy Regulatory Commission	Dockets No. EL16-29 and EL16-30, NCEMC, et al. vs Duke Energy Carolinas and Duke Energy Progress, on behalf of the Respondents (2016)	Capital market environment affecting the determination of the cost of equity capital
Hawaii Public Utilities Commission	Docket No. 2015-0022, Merger Application on behalf of NextEra Energy and Hawaiian Electric Inc. (2015)	Financial strength and conditions & commitments in merger context
U.S. Federal Energy Regulatory Commission	Dockets No. EL14-12 and EL15-45, ABATE, vs MISO, Inc. et al., on behalf of MISO Transmission Owners (2015)	Capital market environment; capital spending and risk
U.S. Federal Energy Regulatory Commission	Dockets No. EL12-59 and 13-78, Golden Spread Electric Coop., on behalf of Southwestern Public Service Co. (2015)	Capital market environment; capital spending and risk
U.S. Federal Energy Regulatory Commission	Dockets No. EL13-33 and EL14-86, on behalf of New England Transmission Owners. (2015)	Capital market environment affecting the cost of equity capital
U.S. Federal Energy Regulatory Commission	Dockets No. ER13-1508 et alia, Entergy Arkansas, Inc. and other Entergy utility subsidiaries, on behalf of Entergy (2014)	Capital market environment affecting the measurement of the cost of equity capital

Jurisdiction	Proceeding	Topic
Delaware Public Service Commission	DE Case 14-193, Merger of Exelon Corp. and Pepco Holdings, Inc. on behalf of the Joint Applicants (2015)	Financial strength and conditions & commitments in merger context
Maryland Public Service Commission	Case No. 9361, Merger of Exelon Corp. and Pepco Holdings, Inc. on behalf of the Joint Applicants (2015)	Financial strength and conditions & commitments in merger context
New Jersey Board of Public Utilities	BPU Docket No. EM 14060581, Merger of Exelon Corp. and Pepco Holdings, Inc., on behalf of the Joint Applicants (2015)	Financial strength and conditions & commitments in merger context
U.S. Federal Energy Regulatory Commission	Docket ER15-572 Application of New York Transco, LLC, on behalf of NY Transmission Owners (2015)	Incentive compensation for electric transmission; capital market access
U.S. Federal Energy Regulatory Commission	Docket EL 14-90-000 Seminole Electric Cooperative, Inc. and Florida Municipal Power Agency vs. Duke Energy FL on behalf of Duke Energy (2014)	Capital market environment affecting the determination of the cost of equity capital
DC Public Service Commission	Formal Case No. 1119 Merger of Exelon Corp. and Pepco Holdings Inc., on behalf of the Joint Applicants (2014-2015)	Financial strength and conditions & commitments in merger context
U.S. Federal Energy Regulatory Commission	Docket EL14-86-000 Attorney General of Massachusetts et. al. vs. Bangor Hydro-Electric Company, et. al., on behalf of New England Transmission Owners (2014)	Return on Equity; capital market environment
Arkansas Public Service Commission	Docket No. 13-028-U. Rehearing on behalf of Entergy Arkansas. (2014)	Investor and rating agency reactions to ROE set by Order.
Illinois Commerce Commission	Docket No. 12-0560 Rock Island Clean Line LLC, on behalf of Commonwealth Edison Company, an intervenor (2013)	Access to capital for a merchant electric transmission line.
U.S. Federal Energy Regulatory Commission	Docket EL13-48-000 Delaware Public Advocate, et. al. vs. Baltimore Gas and Electric Company and PEPCO Holdings et al., on behalf of (i) Baltimore Gas and Electric; (ii) PEPCO subsidiaries (2013)	Return on Equity; capital market view of transmission investment
U.S. Federal Energy Regulatory Commission	Docket EL11-66-000 Martha Coakley et. al. vs. Bangor Hydro-Electric Company, et. al. on behalf of New England Transmission Owners (2012-13)	Return on Equity; capital market view of transmission investment
New York Public Service Commission	Cases 13-E-0030; 13-G-0031; and 13-S-0032 on behalf of Consolidated Edison Company of New York. (2013)	Cash flow and financial strength; regulatory mechanisms

Jurisdiction	Proceeding	Topic
Public Service Commission of Maryland	Case. 9214 re “New Generating Facilities To Meet Long-Term Demand For Standard Offer Service”, on behalf of Baltimore Gas and Electric Co., Potomac Electric Power Co., and Delmarva Power & Light (2012)	Effect of proposed power contracts on the credit and financial strength of MD utility counterparties

CONSULTING & ADVISORY ASSIGNMENTS ⁽¹⁾

Client	Assignment	Objective
Utilities (undisclosed)	Credit advisory. 2022	Plan for financial impacts of a merger.
Xcel Energy/ Public Service Co. of CO	Studied likely investor and credit impact of the PSC’s proposed changes in the recovery of purchased gas cost (Docket 21R-0314G). 2021	Analyze financial impacts of regulatory proposal.
Eversource Energy Inc./Public Service Co. of New Hampshire	White paper analyzing the financial implications of two methods for recovering costs of energy efficiency programs (related to Docket DE 20-092). 2020	Analyze feasibility and financial impacts of regulatory proposal; prepare white paper
Washington Gas Light Co.	Quantified the effect of merger upon the cost of long-term and short-term debt. 2019	Comply with regulatory requirement
Cravath, Swaine & Moore LLP	Evaluated factors that influenced utility spending decisions on operations, maintenance, and capital projects. 2019	Support litigation strategy in bankruptcy proceedings.
NJ American Water Co.	Analyzed impacts of tax reform on water utility’s cash flow and ratings. 2018	Support regulatory strategy
AltaGas Ltd.	Credit advisory on ratings under merger and no-merger cases. 2017	Compare strategic alternatives
Entergy Texas, Inc.	Research study on debt equivalence and capital cost associated with capacity purchase obligations. Impact of new GAAP lease accounting standard on PPAs. 2016	Economic comparison of power purchase obligations and self-build options.
Eversource Energy	Evaluated debt equivalence of power purchase obligations. 2014	Clarify credit impact of various contract obligations.
International Money Center Bank (Undisclosed)	Research study and recommendations on estimating Loss Given Default and historical experience of default and recovery in regulated utility sector. 2014	Efficient capital allocation for loan portfolio.
GenOn Energy Inc.	White Paper on appropriate industry peers for a competitive power generation and energy company. 2012	Appropriate peer comparisons in SEC filings and shareholder communications, compensation studies
Transmission utility (Undisclosed)	Recommended the appropriate capital structure and debt leverage during a period of high capital spending. 2012	Efficient book equity during multi-year capex project; preserve existing credit ratings

Jurisdiction	Proceeding	Topic
Toll Highway (Undisclosed)	Advised on adding debt while minimizing risk of downgrade. Recommended strategy for added leverage and rating agency communications. 2012	Free up equity for alternate growth investments via increased leverage while preserving credit ratings
District Thermal Cooling Project (Undisclosed)	Recommended a project loan structure to deal with seasonal cash flow. Optimized payment schedule, form and timing of financial covenants.	Reduce default risk; efficient borrowing structure

1. Confidential assignments are omitted or client's identity is masked, at client request.

Professional and Executive Training

Southern California Edison Co., Rosemead CA	Designed and delivered in-house training program on evaluation of the credit of energy market counterparties. 2016	
Financial Institution, NYC (Undisclosed)	In-house training. Developed corporate credit case for internal credit training program and coordinated use in training exercise. 2016	
CoBank, Denver CO	Designed and delivered "Midstream Gas and MLPs: Advanced Credit Training". 2014	
Empire District Electric Co., Joppa MO	Designed and delivered in-house executive training session Utility Sector Financial Evaluation. 2014	
PPL Energy Corp, Allentown PA	Designed and delivered in-house Financial Training. 2014	
SNL Knowledge Center Courses, New York NY	Designed and delivered public courses "Credit Analysis for the Power & Gas Sector", 2011-2014	
SNL Knowledge Center Courses, New York NY	Designed and delivered public courses "Analyst Training in the Power & Gas Sectors: Financial Statement Analysis. 2013 -2014	
EEI Transmission and Wholesale Markets	Designed and delivered "Financing and Access to Capital". 2012	
National Rural Utilities Coop Finance Corp.	Designed and delivered in-house training "Credit Analysis for the Power Sector". 2012	
Judicial Institute of Maryland	Designed and delivered "Impact of Court Decisions on Financial Markets and Credit", section of continuing education seminar for MD judges: "Utility Regulation and the Courts", Annapolis MD. 2007	
Edison Electric Institute, New York, NY	"New Analyst Training Institute: Fixed Income Analysis and Credit Ratings", 2008; 2004	