Welcome to your CDP Water Security Questionnaire 2021

W0. Introduction

W0.1

(W0.1) Give a general description of and introduction to your organization.

Exelon Corporation (Nasdaq: EXC) is a Fortune 100 energy company with the largest number of electricity and natural gas customers in the U.S. Exelon does business in 48 states, the District of Columbia and Canada, and had 2020 revenue of $33 billion. Exelon serves approximately 10 million customers in Delaware, the District of Columbia, Illinois, Maryland, New Jersey and Pennsylvania through its Atlantic City Electric, BGE, ComEd, Delmarva Power, PECO and Pepco subsidiaries. Exelon is one of the largest competitive U.S. power generators, with approximately 31,000 megawatts of nuclear, gas, wind, solar and hydroelectric generating capacity comprising one of the nation's cleanest and lowest-cost power generation fleets. The company's Constellation business unit provides energy products and services to approximately 2 million residential, public sector and business customers, including more than three-fourths of the Fortune 100. Follow Exelon on Twitter @Exelon.

Access to water is essential to Exelon's production of energy from our hydroelectric, low-carbon nuclear and fossil generating plants. We rely on more than 38 billion gallons of water each day, and return more than 98% to its source. We understand the importance of being responsible stewards of this critical resource. We maintain a Water Resources Management Policy to help us continuously improve our water management practices. Similarly, we maintain a Biodiversity and Habitat Policy, to help guide our efforts in activities ranging from avian protection to integrated vegetation management that we monitor. And, our Climate Change Policy guides our response to the effects of climate change including effects on watersheds, and our efforts to understand how these changes are impacting the water resources we rely on.

This report contains certain written and oral forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to risks and uncertainties. The factors that could cause actual results to differ materially from the forward-looking statements made by Exelon Corporation, Exelon Generation Company, LLC, Commonwealth Edison Company, PECO Energy Company, Baltimore Gas and Electric Company, Pepco Holdings LLC, Potomac Electric Power Company, Delmarva Power & Light Company, and Atlantic City Electric Company (Registrants) include those factors discussed herein, including those factors discussed with respect to the Registrants discussed in Exelon's 2020 Annual Report of Form 10-K in (a) Part I, ITEM 1A. Risk Factors, (b) Part II, ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, (c) Part II, ITEM 8. Financial Statements and Supplementary Data: Note 19, Commitments and Contingencies, and (d) other factors discussed in filings with the SEC by the Registrants. Readers are cautioned not to place undue reliance on these forward-looking statements, which apply only as of the date of this Report. None of the Registrants undertakes any obligation to publicly release any revision to its forward-looking statements to reflect events or circumstances after the date of this Report.

W-EU0.1a

(W-EU0.1a) Which activities in the electric utilities sector does your organization engage in?

Electricity generation
Transmission
Distribution

W-EU0.1b

(W-EU0.1b) For your electricity generation activities, provide details of your nameplate capacity and the generation for each technology.

	Nameplate capacity (MW)	% of total nameplate capacity	Gross electricity generation (GWh)
Coal – hard	0	0	0
Lignite	0	0	0
Oil	1,104	3.53	20
Gas	8,226	26.31	19,713
Biomass	50	0.16	438

Waste (non-biomass)	0	0	0
Nuclear	18,880	60.37	156,637
Fossil-fuel plants fitted with carbon capture and storage	0	0	0
Geothermal	0	0	0
Hydropower	1,642	5.25	1,249
Wind	746	2.39	2,188
Solar	613	1.96	1,123
Marine	0	0	0
Other renewable	10	0.03	0
Other non-renewable	0	0	0
Total	31,271	100	181,368

W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	January 1, 2020	December 31, 2020

W0.3

(W0.3) Select the countries/areas for which you will be supplying data.

United States of America

W0.4

(W0.4) Select the currency used for all financial information disclosed throughout your response.

USD

W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which operational control is exercised

W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

No

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Important	Neutral	Access to affordable, reliable and adequate water supplies is imperative to the success of our business. Direct water access supports our zero-emission hydroelectric and nuclear facilities and our fossil fuel steam power plants. While water quality is a consideration, access to sufficient volume is more of a concern. We use approximately 38 billion gallons of water each day, and greater than 98% of the water is returned to its source. Water supply has not been a significant challenge to date; however, we continue to assess our risks, evaluate our impacts and closely monitor our watersheds on an ongoing basis. We engage

			the communities in our watersheds' improvement, environmental education and sustainability initiatives. Like direct importance, indirect importance is more dependent on quantity than quality; therefore, we rate it as neutral. Our largest upstream dependence is on fuels and purchased power for resale. Our products have de minimis requirements for water at the end point of use.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Neutral	Our nuclear and fossil plants located in saline watersheds depend directly on brackish water for cooling. Our Limerick nuclear plant collaborated with regulators and environmental stakeholders to develop a flow augmentation alternative that uses upriver mine water to supplement flow in the Schuylkill River. Adequate, affordable and reliable water supplies to support our indirect operations have not been a challenge to date; however, we continue to assess our risks, evaluate our impacts and closely monitor our watersheds on an ongoing basis. We engage the communities in our watersheds' improvement, environmental education and sustainability initiatives. Like direct importance, indirect importance is more dependent on quantity than quality; therefore, we rate it as neutral. Our largest upstream dependence is on fuels and purchased power for resale. Our products have de minimis requirements for water at the end point of use.

W1.2

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	We measure all water inflows and outflows by source (including dedicated cooling ponds) in accordance with permit and/or internal performance monitoring requirements and methodology specifications for both quantitative and qualitative aspects of water use (e.g. sensor or meter type, calibration frequency, testing) defined by the engineering department of individual operating companies or sites.

Water withdrawals – volumes by source	100%	We measure all water inflows and outflows by source (including dedicated cooling ponds) in accordance with permit and/or internal performance monitoring requirements and methodology specifications for both quantitative and qualitative aspects of water use (e.g. sensor or meter type, calibration frequency, testing) defined by the engineering department of individual operating companies or sites.
Water withdrawals quality	100%	We monitor water quality of all withdrawals as necessary to meet the performance requirements of our systems in accordance with permit and/or internal performance monitoring requirements and methodology specifications (e.g. sensor or meter type, calibration frequency, testing) defined by the engineering department of individual operating companies or sites.
Water discharges – total volumes	100%	We measure all water inflows and outflows by source (including dedicated cooling ponds) in accordance with permit and/or internal performance monitoring requirements and methodology specifications of our systems (e.g. sensor or meter type, calibration frequency, testing) defined by the engineering department of individual operating companies or sites.
Water discharges – volumes by destination	100%	We measure all water inflows and outflows by source (included dedicated cooling ponds) by source and destination water bodies in accordance with permit and/or internal performance monitoring requirements and methodology specifications (e.g. sensor or meter type, calibration frequency, testing) defined by the engineering department of individual operating companies or sites.
Water discharges – volumes by treatment method	100%	We monitor all discharges by treatment and/or use methods in accordance with permit and/or internal performance monitoring requirements and methodology specifications (e.g. sensor or meter type, calibration frequency, testing) defined by the engineering department of individual operating companies or sites.
Water discharge quality – by standard effluent parameters	100%	We monitor and report standard effluent parameters including chemical constituents and temperature in accordance with our various operating permits and methodology specifications (e.g. sensor or meter type, calibration frequency, testing) defined by engineering department of individual operating companies or sites.

Water discharge quality – temperature	100%	We monitor and report standard effluent parameters including chemical constituents and temperature in accordance with our various operating permits and methodology specifications (e.g. sensor or meter type, calibration frequency, testing) defined by engineering department of individual operating companies or sites.
Water consumption – total volume	100%	We measure and report total water consumption (withdrawal minus discharge) for all of our water use in accordance with permit and/or internal performance monitoring requirements and methodology specifications (e.g. sensor or meter type, calibration frequency, testing) defined by the engineering department of individual operating companies or sites.
Water recycled/reused	100%	We measure the volume of recycled water at all facilities that generate or use recycled water in accordance with permit and/or internal performance monitoring requirements and methodology specifications (e.g. sensor or meter type, calibration frequency, testing) defined by the engineering department of individual operating companies or sites.
The provision of fully-functioning, safely managed WASH services to all workers	100%	We provide WASH services in all facilities. We meet all drinking and sanitary water needs of our facilities.

W-EU1.2a

(W-EU1.2a) For your hydropower operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations measured and monitored	Please explain
Fulfilment of downstream environmental flows	100%	We fulfil downstream environmental flow commitments in accordance with company policy and/or permit requirements that establish minimum flow requirements and, monitoring frequency and methodology specifications (e.g. sensor or meter type, calibration frequency, testing) defined by the engineering department of individual operating companies or sites.
Sediment loading	100%	We monitor and report standard effluent parameters including sediment parameters in accordance with company policy and/or our various operating permits and methodology

		specifications (e.g. sensor or meter type, calibration frequency, testing) defined by engineering department of individual operating companies or sites.
Other, please specify	Not relevant	Not applicable

W1.2b

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	52,860,075	About the same	The retirement of our Fairless Hills landfill gas facility along with three smaller peaking facilities (Notch Cliff, Pennsbury and Westport) on June 1, 2020 are facilities that did not have operations that contributed significantly to water withdrawals. Therefore, water withdrawals were consistent year over year. Future withdrawals may be less if our Byron and Dresden nuclear sites are retired.
Total discharges	52,204,072	About the same	Total discharges were about the same compared to the prior calendar year. The retirement of our Fairless Hills landfill gas facility along with three smaller peaking facilities (Notch Cliff, Pennsbury and Westport) on June 1, 2020 had no impact on discharge volumes year over year. Future discharges may be less if our Byron and Dresden nuclear sites are retired.
Total consumption	656,003	Lower	Our consumption of water in 2020 was lower due to less groundwater withdrawals across our operations. The retirement of our Fairless Hills landfill gas facility along with three smaller peaking facilities (Notch Cliff, Pennsbury and Westport) on June 1, 2020 did not significantly change water consumption. Operation of closed cycle facilities was greater than open cycle facilities which contributed to less consumptive use. Consumption was also lower in 2020 was lower than 2019 due to Covid-19 and lower office occupation and employee use. Consumption related to lower office occupation and employee use is anticipated to stabilize when employees

			return to the office in the future. However, overall future consumption may be less if our Byron and Dresden sites are retired.

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	Withdrawals are from areas with water stress	Identification tool	Please explain
Row 1	No	WRI Aqueduct	Based on an analysis of our overall water risk as weighted for the electric power industry using the Aqueduct 3.0 Water Risk Atlas, we have no significant water use in high-risk (3-4) areas as determined by the model. Overall water risk measures all water-related risks by aggregating all selected indicators (13 factors) from the Physical Quantity, Quality and Regulatory & Reputational Risk categories and weighted by factors for the electric power sector as selected by the model.

W1.2h

(W1.2h) Provide total water withdrawal data by source.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	47,159,466	About the same	The retirement of our Fairless Hills landfill gas facility along with three smaller peaking facilities (Notch Cliff, Pennsbury and Westport) on June 1, 2020 did not significantly change water withdrawals. Therefore, fresh surface water withdrawals were consistent year over year.

Brackish surface water/Seawater	Relevant	5,293,781	About the same	Brackish water intake for thermoelectric cooling was approximately the same compared to 2020 due to similar operations of our facilities located in watersheds of brackish water sources.
Groundwater – renewable	Relevant	403,215	Lower	Groundwater withdrawals were lower year-over-year at several locations that use groundwater resources. These withdrawals are used for non-cooling requirements and WASH requirements at our facilities.
Groundwater – non-renewable	Not relevant			
Produced/Entrained water	Not relevant			
Third party sources	Relevant	3,613	Lower	Municipal water use was lower on a year-over-year basis, primarily due to lower office occupation as a result of Covid-19. These uses are primarily for non-cooling requirements and WASH requirements at our facilities.

W1.2i

(W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	47,306,335	About the same	Total discharges were about the same compared to the prior calendar year. The retirement of our Fairless Hills landfill gas facility along with three smaller peaking facilities (Notch Cliff, Pennsbury and Westport) on June 1, 2020 had no impact on surface discharge volumes year over year.

Brackish surface water/seawater	Relevant	4,893,336	About the same	Brackish water discharge for thermoelectric cooling was approximately the same compared to 2020 due to similar operations of our facilities located in watersheds of brackish water sources.
Groundwater	Relevant	788	Lower	Groundwater discharges were lower year-over-year at several locations that use groundwater resources, due to lower office occupation as a result of Covid-19. These withdrawals are used for non-cooling requirements and WASH requirements at our facilities.
Third-party destinations	Relevant	3,613	Lower	Municipal water discharges to POTWs were lower on a year-over-year basis, primarily due to lower office occupation as a result of Covid-19. These uses are primarily for non-cooling requirements and WASH requirements at our facilities.

W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	1,500,613	This is our first year of measurement	1-10	Tertiary treatment is utilized at our Dresden and Quad Cities facilities, primarily in the form of UV disinfection for groundwater use for non-cooling activities and WASH requirements at the facilities. Treatment is conducted in accordance with applicable permit and/or internal performance monitoring requirements and methodology specifications (e.g. sensor or meter type, calibration frequency, testing) defined by the engineering department of individual operating

					companies or sites. A comparison to prior year tertiary treatment volume cannot be made as this is the first year of measurement.
Secondary treatment	Not relevant				Secondary treatment is not utilized at any of our facilities.
Primary treatment only	Relevant	1,757,602	This is our first year of measurement	11-20	Primary treatment is utilized at our Braidwood, Byron, Clinton, Dresden and Medway facilities primarily via the use of oil/water separator equipment. Treatment is conducted in accordance with applicable permit and/or internal performance monitoring requirements and methodology specifications (e.g. sensor or meter type, calibration frequency, testing) defined by the engineering department of individual operating companies or sites. A comparison to prior year tertiary treatment volume cannot be made as this is the first year of measurement.
Discharge to the natural environment without treatment	Relevant	39,772,240	This is our first year of measurement	51-60	Some of our facilities including but not limited to Byron, Calvert Cliffs, Peach Bottom, Colorado Bend II and Wolf Hollow II have a portion of their water discharges returned to the environment without treatment based upon determinations made by the federal, state and/or local authorities as part of their discharge permit review and authorization. A comparison to prior year tertiary treatment volume cannot be made as this is the first year of measurement.

Discharge to a third party without treatment	Relevant	80	This is our first year of measurement	31-40	Some of our facilities including but not limited to Limerick, Eddystone, Handley, Medway and Perryman have a portion of their discharges sent to a third party or publicly owned treatment works (POTW), primarily for sanitary sewage. Discharges are conducted in accordance with applicable permit and/or internal performance monitoring requirements and methodology specifications (e.g. sensor or meter type, calibration frequency, testing) defined by the engineering department of individual operating companies or sites. A comparison to prior year tertiary treatment volume cannot be made as this is the first year of measurement.
Other	Relevant	1,987,992	This is our first year of measurement	11-20	Some of our facilities such as Fitzpatrick, Ginna, Limerick and Nine Mile Point have a portion of their discharges chlorinated and dechlorinated prior to discharge for condenser and service water systems and clamicide treatment for the inhibition of mussel growth. Treatment is conducted in accordance with applicable permit and/or internal performance monitoring requirements and methodology specifications (e.g. sensor or meter type, calibration frequency, testing) defined by the engineering department of individual operating companies or sites. A comparison to prior year tertiary treatment volume cannot be made as this is the first year of measurement.

W-EU1.3

(W-EU1.3) Do you calculate water intensity for your electricity generation activities?

Yes

W-EU1.3a

(W-EU1.3a) Provide the following intensity information associated with your electricity generation activities.

Water intensity value (m3)	Numerator: water aspect	Denominator	Comparison with previous reporting year	Please explain
1.14	Total water consumption	MWh	About the same	Our water intensity value for 2020 is about the same as the intensity value for 2019. Operations were not significantly different between the two years and our withdrawals and discharges were also about the same between 2019 and 2020. The intensity value reported is for total water consumption (intake minus discharge divided by MWh) for our thermoelectric power generation for the current reporting year. We do not adjust water use for equity share ownership in generation assets. This calculation is based on gross water withdrawals and gross generation for each plant included. This calculation includes nuclear, fossil-fuelled, and biomass plants that utilize a cooling cycle. This calculation does not include fossil-fuelled plants that do not use a cooling cycle, or renewable resources including hydroelectric, solar, and wind. We use this value internally for benchmarking against published values of thermoelectric water consumption in the power generation sector. Early trends indicate that our consumption is generally lower than the industry average. We expect that long-term trends may show lower overall withdrawals of cooling water but increased consumption across the sector in response to regulatory requirements for water intake rates (316 (b)), and could also be less in the future if our Byron and Dresden nuclear sites are retired.

W1.4

(W1.4) Do you engage with your value chain on water-related issues?

Yes, our suppliers

Yes, our customers or other value chain partners

W1.4a

(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

Row 1

% of suppliers by number

1-25

% of total procurement spend

1-25

Rationale for this coverage

Suppliers are required to provide information which can be reviewed against our company environmental criteria. This is the proportion of suppliers who provide details regarding water aspects for their products and services.

Impact of the engagement and measures of success

Our supply chain managers use a list of environmental criteria to evaluate products during the procurement process to understand indirect water use. Exelon Supply Management incorporates environmental performance requirements and participation in voluntary pollution reduction programs into the supply procurement process, including measures to address supplier water use. This has encouraged dialog between suppliers and category managers leading to recommendations and procurement of some products with lower water intensities. We develop risk analyses of our suppliers to manage our own risks.

Comment

Exelon is a member of the Electric Utility Industry Sustainable Supply Chain Alliance which is developing voluntary procurement standards and promoting supply chain environmental management practices, including water use. Our Constellation business unit publishes a guide to educate customers on how to set their own sustainability goals and to offer our sustainability services backed by our unique expertise in energy and water efficiency.

W1.4b

(W1.4b) Provide details of any other water-related supplier engagement activity.

Type of engagement

Onboarding & compliance

Details of engagement

Inclusion of water stewardship and risk management in supplier selection mechanism

% of suppliers by number

1-25

% of total procurement spend

1-25

Rationale for the coverage of your engagement

Suppliers are required to provide information which can be reviewed against our company environmental criteria. This is the proportion of suppliers who provide details regarding water aspects for their products and services.

Impact of the engagement and measures of success

Our supply chain managers use a list of environmental criteria to evaluate products during the procurement process to understand indirect water use. Exelon Supply Management incorporates environmental performance requirements and participation in voluntary pollution reduction programs into the supply procurement process, including measures to address supplier water use. This has encouraged dialog between

suppliers and category managers leading to recommendations and procurement of some products with lower water intensities. We develop risk analyses of our suppliers to manage our own risks.

Comment

Exelon is a member of the Electric Utility Industry Sustainable Supply Chain Alliance which is developing voluntary procurement standards and promoting supply chain environmental management practices, including water use. Our Constellation business unit publishes a guide to educate customers on how to set their own sustainability goals and to offer our sustainability services backed by our unique expertise in energy and water efficiency.

Type of engagement

Incentivizing for improved water management and stewardship

Details of engagement

Water management and stewardship action is integrated into your supplier evaluation

% of suppliers by number

1-25

% of total procurement spend

1-25

Rationale for the coverage of your engagement

Suppliers are required to provide information which can be reviewed against our company environmental criteria. This is the proportion of suppliers who provide details regarding water aspects for their products and services.

Impact of the engagement and measures of success

Our supply chain managers use a list of environmental criteria to evaluate products during the procurement process to understand indirect water use. Exelon Supply Management incorporates environmental performance requirements and participation in voluntary pollution reduction programs into the supply procurement process, including measures to address supplier water use. This has encouraged dialog between

suppliers and category managers leading to recommendations and procurement of some products with lower water intensities. We develop risk analyses of our suppliers to manage our own risks.

Comment

Exelon is a member of the Electric Utility Industry Sustainable Supply Chain Alliance which is developing voluntary procurement standards and promoting supply chain environmental management practices, including water use. Our Constellation business unit publishes a guide to educate customers on how to set their own sustainability goals and to offer our sustainability services backed by our unique expertise in energy and water efficiency.

Type of engagement

Innovation & collaboration

Details of engagement

Encourage/incentivize innovation to reduce water impacts in products and services

% of suppliers by number

1-25

% of total procurement spend

1-25

Rationale for the coverage of your engagement

Suppliers are required to provide information which can be reviewed against our company environmental criteria. This is the proportion of suppliers who provide details regarding water aspects for their products and services.

Impact of the engagement and measures of success

Our supply chain managers use a list of environmental criteria to evaluate products during the procurement process to understand indirect water use. Exelon Supply Management incorporates environmental performance requirements and participation in voluntary pollution reduction programs into the supply procurement process, including measures to address supplier water use. This has encouraged dialog between suppliers and category managers leading to recommendations and procurement of some products with lower water intensities. We develop risk

analyses of our suppliers to manage our own risks. Exelon is a member of the Electric Utility Sustainable Supply Chain Alliance which is developing voluntary procurement standards and promoting supply chain environmental management practices, including water use.

Comment

Aquify is a wholly-owned subsidiary of Exelon Corporation. Our utilities led the Smart Grid revolution—installing sensors and meters and deploying advanced analytics and automation resulting in unprecedented reliability, resilience and responsiveness. Aquify is leveraging Exelon's vast knowledge, experience, people and assets to help water utilities operate more proactively and efficiently.

W1.4c

(W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

Constellation is Exelon's competitive wholesale and retail business. This business supplies power, natural gas and energy products and services for homes and businesses across the continental United States, as well as home services in the Mid-Atlantic region and Texas. Constellation works with customers on tailored solutions to achieve their sustainability goals while managing their energy and operational costs. For many large-scale efficiency projects, the cost of investments in infrastructure improvements are paid for by the ensuing energy cost savings. Constellation uses audits, engineering, design, construction management and long-term monitoring and analytics to design and implement projects. Through regular engagement with our stakeholders, we improve our understanding of emerging trends affecting our business and address stakeholder needs and concerns. We use stakeholder feedback to inform our sustainability strategy and business plans. Every year, we facilitate specialized forums with individual stakeholder groups to discuss their sustainability interests and concerns to incorporate in our business and sustainability planning. Our stakeholder partners include customers, communities, employees, governments, industry groups, investors, media, NGOs and suppliers. Exelon engaged with more than 20 institutional investors in 2020 on the issues of climate change and other sustainability topics. We will continue engaging with investors and communities in the coming years to ensure our climate strategies align with our business and societal needs.

W2. Business impacts

W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?

No

W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

Yes, fines, enforcement orders or other penalties but none that are considered as significant

W2.2a

(W2.2a) Provide the total number and financial value of all water-related fines.

Row 1

Total number of fines

1

Total value of fines

524

% of total facilities/operations associated

1

Number of fines compared to previous reporting year

Lower

Comment

W3. Procedures

W-EU3.1

(W-EU3.1) How does your organization identify and classify potential water pollutants associated with your business activities in the electric utilities sector that could have a detrimental impact on water ecosystems or human health?

Under the federal Clean Water Act, NPDES permits for discharges into waterways are required to be obtained from the EPA or from the state environmental agency to which the permit program has been delegated; permits must be renewed periodically. Certain of Exelon's facilities discharge storm water and industrial wastewater into waterways and are therefore subject to these regulations and operate under NPDES permits or pending applications for renewals of such permits after being granted an administrative extension. Generation is also subject to the jurisdiction of the Delaware River Basin Commission and the Susquehanna River Basin Commission, regional agencies that primarily regulate water use.

Potential water pollutants associated with our business activities are identified and classified based upon parameters to be monitored and measured in accordance with facility permit requirements. In addition, potential pollutants of concern may be identified through watershed organizations or Total Maximum Daily Load (TMDL) limits in watersheds where we have operations such as the Delaware River watershed where we monitor PCB parameters as a result of a PCB TMDL in the watershed. Typical permit parameters can address water quality aspects from pH, temperature, dissolved oxygen, total suspended solids among others, and can vary across our operations depending upon the specific type of generating facility (e.g. nuclear, fossil, etc.) as well as geographical location and prevailing watershed characteristics. These aspects are considered across our value chain based upon individual facility and watershed characteristics such as TMDLs or other specific situations.

W-EU3.1a

(W-EU3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants associated with your activities in the electric utilities sector on water ecosystems or human health.

Potential water pollutant	Description of water pollutant and potential impacts	Management procedures	Please explain

Hydrocarbons	Oil and grease – potential surface water impacts in immediate receiving water body	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community/stakeholder engagement Emergency preparedness	Environmental monitoring is conducted in accordance with applicable permit requirements and company procedures. Successful implementation is assessed through sampling, tracking of self-identified permit non-compliances or other regulatory notifications. Our facilities such as and others utilize SPCC plans and regularly review and update them to control potential impacts of oil and grease.
Radiation	Radionuclides – potential for localized surface or groundwater impacts	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community/stakeholder engagement Emergency preparedness	Environmental monitoring is conducted in accordance with applicable permit requirements. Exelon has adopted a Radiological Groundwater Protection program that includes a robust groundwater monitoring program designed by a third-party environmental engineering firm. Samples are obtained from wells at least quarterly and are reviewed by station personnel, a corporate geologist and a third-party geologist to identify and respond to impacts, if any. In addition, we have procedures that outline monitoring and ground water protection program objectives at our facilities which follow the Nuclear Energy Institute's NEI-07-07 Rev 1 Ground Water Protection Initiative Guidance Document which also includes communication to federal, state and local stakeholders. Monitoring is also conducted in accordance with the NRC REMP/RETS program requirements. Successful implementation is assessed through sampling, tracking of self-identified permit non-compliances or other regulatory notifications.
Contaminated cooling water	Radionuclides, other contaminants	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages	Environmental monitoring is conducted in accordance with applicable permit requirements. Cooling water is non-contact and does not typically contain station derived radionuclides or other contaminants, and is monitored to ensure compliance with all environmental permits. Successful implementation is assessed through sampling, tracking of self-identified permit non-compliances or other regulatory notifications.

		Community/stakeholder engagement Emergency preparedness	
Thermal pollution	Temperature – potential for surface water impacts in immediate receiving water body	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community/stakeholder engagement Emergency preparedness	Environmental monitoring is conducted in accordance with applicable permit requirements and company procedures. Successful implementation is assessed through sampling, tracking of self-identified permit non-compliances or other regulatory notifications.
Other, please specify PCBs	PCBs – potential surface water impacts in immediate receiving water body	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community/stakeholder engagement Emergency preparedness	Environmental monitoring is conducted in accordance with applicable permit requirements and company procedures. Successful implementation is assessed through sampling, tracking of self-identified, permit non-compliances or other regulatory notifications. We are also performing targeted replacement of equipment containing PCBs across our utility businesses reducing the likelihood of PCB releases.
Other, please specify Nutrients	Nitrogen and Phosphorus - potential surface water impacts in immediate receiving water body	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community/stakeholder engagement Emergency preparedness	Environmental monitoring is conducted in accordance with applicable permit requirements and company procedures. Successful implementation is assessed through sampling, tracking of self-identified permit non-compliances or other regulatory notifications.

Other, please specify Dissolved oxygen	CBOD, COD – potential surface water impacts in immediate receiving water body	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community/stakeholder engagement Emergency preparedness	Environmental monitoring is conducted in accordance with applicable permit requirements and company procedures. Successful implementation is assessed through sampling, tracking of self-identified permit non-compliances or other regulatory notifications.

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an enterprise risk management framework

Frequency of assessment

More than once a year

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market
Enterprise Risk Management
International methodologies
Databases

Tools and methods used

WRI Aqueduct
Environmental Impact Assessment
IPCC Climate Change Projections
Regional government databases
Other, please specify
Internal methods - EMS, risk procedures

Comment

The Enterprise Risk Management team, in collaboration with our operating companies, is responsible for coordinating Exelon's risk management program. This framework enables us to anticipate strategic and emerging risks, integrate risk into business planning, minimize unexpected performance variances and support growth initiatives within Exelon's risk appetite policy. Working closely with our operating companies, our risk team leads interactive assessments to identify, assess, mitigate and monitor risk. These assessments deepen our understanding of risks, enable effective action to mitigate risks and strengthen our risk culture. We align our key risk indicators with our risk appetite and industry-leading practices. In 2020, Exelon continued progress on scenario analysis and stress testing several enterprise risks which included climate change associated impacts over a future 30-year period. Water-related risks at the local facility/watershed level are identified, managed and communicated internally per the corporate policy for planning and risk abatement at the corporate level. We evaluate objectives and targets in compliance with our ISO14001-2015 certified environmental management system to address environmental risks and report on these matters quarterly to the corporate Executive Committee.

Supply chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an enterprise risk management framework

Frequency of assessment

More than once a year

How far into the future are risks considered?

3 to 6 years

Type of tools and methods used

Tools on the market
Enterprise Risk Management
International methodologies
Databases

Tools and methods used

WRI Aqueduct
Regional government databases
Other, please specify
Internal methods-risk management, EUISSCI

Comment

Exelon works with approximately 8,000 suppliers to procure a wide range of materials and services that support our company operations. We actively engage, evaluate and monitor our suppliers to better understand our supply chain and proactively identify and address potential business continuity or related risks. In addition to managing our supply chain from a risk and performance perspective, we also work to align Exelon's sourcing practices with company objectives in environmental responsibility, supplier diversity and local economic development. Exelon employs a risk management process developed by our Supply and Enterprise Credit Risk Management team to identify, communicate and mitigate risks. Our semi-annual review of all suppliers determines supplier criticality to our business. This team conducts in-depth risk reviews of our critical suppliers. The team evaluates suppliers based on third-party credit reports, criticality of the supplier to Exelon's business functions and company objectives (such as diversity and sustainability), probability of a risk event, the potential severity of impacts and our resilience to a disruption through alternate suppliers. The team regularly communicates the results of these risk reviews to management. We advance

sustainability in our supply chain through both our direct relationships with our suppliers and our engagement with the Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA).

Other stages of the value chain

Coverage

Full

Risk assessment procedure

Other, please specify

Regulatory permitting of our production facilities including hydroelectric and thermoelectric power plants.

Frequency of assessment

Every three years or more

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Enterprise Risk Management

Tools and methods used

Other, please specify

Regulatory Guidance and requirements including those from the Federal Energy Regulatory Commission, (FERC Licensing), the National Environmental Policy Act (NEPA,), USEPA and State NPDES (CWA) permitting.

Comment

Regulatory compliance is an environmental policy requirement and corporate metric for all business units. Certain of our facilities with once-through cooling water systems may be subject to additional requirements as a result of permit renewals reflecting updates to relevant Clean Water Act (CWA) regulations. We are likewise required to comply with FERC licensing requirements at our hydroelectric facilities.

W3.3b

(W3.3b) Which of the following contextual issues are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	Water drives our hydroelectric facilities and cools our nuclear and fossil fuel steam generating power plants. Water supply or withdrawal risk data is managed with thermal models that use real-time data gathered by telemetry in the watershed. The true value of the thermal models is their ability to evaluate different weather scenarios and operational responses. Our Summer Readiness Assessments evaluate potential issues such as drought risk that can impact both water withdrawal and operational discharge aspects. When a drought risk is identified, Exelon Generation activates a Drought Monitoring Task Force that reports to the Executive Committee; this group spans various business units and reports on an assessment of current drought conditions, and the impacts of the drought both historical and potential. Our Drought Task Force looks ahead from 3 days (weather forecast) to the seasonal climate forecast. The Drought Task Force recommends regulatory, operational, and technical solutions, identifies and assesses other regions of concern and potential impacts, and reports on ongoing work and next steps. We also utilize the WRI Aqueduct global water risk mapping tool that evaluates both water quality and quantity aspects to evaluate water risk associated with our operations. Exelon joined the DOE Partnership for Energy Sector Climate Resilience to better understand the impacts of climate change on our systems, and to improve our resilience to climate change. We have undertaken a Climate Change Vulnerability Assessment intended to serve as a tool for communicating consistently and comprehensively about the physical risks of climate change to Exelon and the steps the company has been taking to address these risks. We participate in EPRI, MIT Center for Energy and Environmental Policy Research, WRI, DOE and national labs to further research. We use WRI's Aqueduct national risk map to assess water risk across our operations. We monitor reporting from organizations such as the Brazos River Authority and the Delaware River Basin Commission as well as USGS gages to assess catchment level water availability concerns on daily/weekly basis. We also participate in the Merrill Creek Owners Group for which the Merrill Creek Reservoir provides flow augmentation in the Delaware River in times of drought.

Water quality at a basin/catchment level	Relevant, always included	Water supply risk data is managed with thermal models that use real-time data gathered by telemetry in the watershed to evaluate potential environmental risk not only to water withdrawals, but also discharges from our operations. Operationally, our thermal models update 12 times per day, incorporating approximately 30,000 hourly data points. The true value of the thermal models is their ability to evaluate different weather scenarios and operational responses to determine ambient thermal changes that may affect operations as well as potential discharge impacts on the watershed. Our Summer Readiness Assessments evaluate potential issues such as drought risk. When a drought risk is identified, Exelon Generation activates a Drought Monitoring Task Force that reports to the Executive Committee; this group spans various business units and reports on an assessment of current drought conditions, and the impacts of the drought' both historical and potential. Our Drought Task Force looks ahead from 3 days (weather forecast) to the seasonal climate forecast. The Drought Task Force recommends regulatory, operational, and technical solutions, identifies and assesses other regions of concern and potential impacts, and reports on ongoing work and next steps. We also utilize the WRI Aqueduct global water risk mapping tool that evaluates both water quality and quantity aspects to evaluate water risk associated with our operations. We utilize tools such as the Early Warning System of the Philadelphia Water Department to receive notifications of water quality emergencies as well as to report any impacts to water quality as a result of our operations.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Our ISO 14001 EMS program mandates that we understand, review and address stakeholder concerns. As of January 2019, all six of our utility businesses – Atlantic City Electric, BGE, ComEd, Delmarva Power, PECO and Pepco – achieved ISO14001 certification. We participate in regional partnerships and groups such as the Water Quality Advisory Committee of the Delaware River Basin Commission, the Electric Power Research Institute, the Wildlife Habitat Council and CERES to monitor broader stakeholder issues.
Implications of water on your key commodities/raw materials	Relevant, always included	Exelon is a member of the Electric Utility Industry Sustainable Supply Chain Alliance which is developing voluntary procurement standards and promoting supply chain environmental management practices, including environmental compliance, GHG emissions and water use. We continue to seek and implement best management procurement practices at Exelon voluntarily, with the expectation that our suppliers will lessen their environmental impacts, including those related to water use. Exelon performs evaluations of supplier risks, including water treatment chemicals, and including the risk to Exelon if suppliers were to

		experience business interruption, compliance issues, operations disruptions or other types of risks, as well as mitigation strategy and a risk measurement metric. This is true during NPDES renewal application activities such as those recently completed at our Eddystone and Peach Bottom facilities. Suppliers are evaluated for their risk and resilience to various impacts including extreme weather events such as snow, ice, hurricanes and floods.
Water-related regulatory frameworks	Relevant, always included	Our business depends on reliable, affordable and adequate water supplies. We engage and contribute our expertise and knowledge base at the local, state and federal levels in the legislative and regulatory process. We also utilize results from annual WRI Aqueduct global water risk tool to inform our decisions. Exelon's Water Resource Management Policy requires that all operations comply with applicable environmental laws and regulations, and that voluntary commitments are fulfilled. Regulatory compliance is an environmental policy requirement and corporate metric for all business units. For example, certain of our facilities with once-through cooling water systems may be subject to additional requirements as a result of permit renewals reflecting updates to relevant Clean Water Act (CWA) regulations. We are evaluating available BTA alternatives and/or other regulatory initiatives that may be needed to comply with current regulations. Exelon's Environmental Regulatory & Policy Group tracks environmental regulatory developments and updates the Environmental Review Council and the Executive Committee as needed. Engineering cost studies are conducted as warranted evaluating business risks and response options.
Status of ecosystems and habitats	Relevant, always included	We have a formal process for assessing ecosystem impact risks of our development investments, in the earliest phases of planning. Our operating companies remain up to date on local endangered species and habitat issues as part of their basic compliance obligations; but moreover, as part of the corporate Biodiversity and Habitat Policy (EN-AC-4) and stewardship. Our utility operations Avian Protection plans inform daily activities on local species at risk. Local aquatic habitat risks are assessed through 316(a) and (b) studies at plants such as our Calvert Cliffs and Handley facilities. Our business units perform significant aspects risk assessments annually; potential ecosystem changes, concerns and issues that may pose impact risk would be communicated to management through implementation of ISO14001 compliant and ISO certified Environmental Management Systems with appropriate responses required. Our Water Resources Management Policy identifies key issues to be addressed including: ensuring adequate and economical water supplies, enhancing water quality, preserving and restoring biodiversity, and maintaining quality community recreational areas. In response to the effects of climate change we are

		monitoring watersheds to understand how these changes are impacting water resources. Exelon joined the DOE Partnership for Energy Sector Climate Resilience to better understand the impacts of climate change on our systems, and to improve our resilience to climate change. We use WRI's Aqueduct global water risk tool and associated indicator species maps to assess potential risks to ecosystems at the local level. Scenarios and sensitivities Exelon explored in our hydrology/climate change study included potential changes in ecosystems (watersheds) upstream of our facility during typical low-flow months of the year with a 50 percent increase in water use, which is reasonable given the currently projected growth in agriculture and urban development.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	These are basic requirements for Exelon's internal company business continuity health initiatives, as well as all US facilities according to health department regulations, building codes, and applicable regulations for water supplies. We meet all of these needs at all of our facilities.
Other contextual issues, please specify	Relevant, always included	The U.S. Department of Energy (DOE) has sought participation from the power sector in a voluntary partnership to enhance U.S. energy security by improving the resilience of energy infrastructure to extreme weather and climate change impacts. Exelon has participated in this partnership. The goal was to accelerate investment in technologies, practices and policies that will enable a resilient 21st century energy system. The Partnership sought to facilitate risk-based decisions and greater investment in cost-effective strategies for a more climate-resilient power sector. Exelon has undertaken a Climate Change Vulnerability Assessment intended to serve as a tool to assess the physical impacts of climate change on Exelon and the steps the company is taking to address these risks. The physical changes that are projected to affect weather patterns that will most impact the electric energy provider sector relate to: increasing air temperatures - increasing summer peak and average temperatures and more mild winter temperatures (but with occasional extreme temperature lows, i.e. polar vortexes); increasing storm event intensity and frequency – increased physical damage causing impacts on reliability of service for T&D and potential impacts on the availability of power plants; sea level rise – increased risk of coastal flooding that could impact T&D infrastructure, the reliability of power delivery and potential impacts on power plant availability; and changes in precipitation and water availability – increased risk of flooding, water supply shortages and extreme precipitation events including snow fall and ice storms.

W3.3c

(W3.3c) Which of the following stakeholders are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Customers	Relevant, always included	We provide sustainability consulting including water use efficiency measures through our Constellation and utility business units (such as PECO's Energy Audits and BGE's Quick Home Energy Check-up). Constellation's core business is assisting customers to assess risk and manage energy-related issues that reduce energy consumption, water use and cost, while improving reliability and reducing costs. We are accredited by the National Association of Energy Service Companies (NAESCO) as an "Energy Services Provider" and hold a number of IDIQ contracts with DOE, GSA and DOD and various state governments. The majority of our clean energy production for our customers is provided by our nuclear fleet, which in turn relies on reliable, affordable and adequate water supplies. Two-way communication with customers allows us to innovate new products, improve customer service and maintain our "license to operate" and grow. We regularly engage with our customers and community members through a variety of existing channels including customer surveys, customer service calls, and community meetings, among others.
Employees	Relevant, always included	The Exelon Employee Survey includes questions to gather employee input evaluating environmental performance. Exelon's water management policy calls for raising the awareness of employees of the strategic importance of water and the need for effective water management. Environmental performance and significant environmental aspects are discussed in regular Management Review Meetings as well as through environmental training that supports our ISO 14001 certified Environmental Management System. We also utilize our annual Corporate Sustainability Report to convey environmental performance to employees as well as receive feedback from them on the information and data included in the annual report. In addition, employees are encouraged to submit suggestions for innovative water improvement strategies or technologies through the company's Reinvent portal.
Investors	Relevant, always included	We engage investors in our quarterly earnings calls and analyst meetings, as well as investor surveys such as the DJSI and CDP. Exelon is committed to the Ceres Principles and annually Ceres facilitates a corporate level review of Exelon's material sustainability issues and performance with a group of interested stakeholders

		including investors. Water resource issues and the company's response are addressed as part of the review. Exelon also publishes an annual Corporate Sustainability Report (CSR) report that maps to Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB) sustainability standards which include water management and climate aspects. We utilize our ISO 14001 certified Environmental Management System as a mechanism to engage stakeholders including investors, achieve compliance and drive continual improvement.
Local communities	Relevant, always included	Exelon utilizes conservation stewardship and sustainable business practices within watersheds where we have an operational footprint. Comprehensive environmental stewardship strategies provide long-term guidance for identifying and addressing priority issues that are relevant to our business objectives and the interests of key stakeholders, within watersheds like the Chesapeake Bay. Environmental conservation plans guide our pursuit of emerging technologies that address those issues. The ecological well-being of watersheds is linked to the social fabric of communities, the economic health of the regions and the quality of life of many of our customers. Exelon uses watershed strategies and conservation stewardship plans to address issues related to water quality, species of concern, vegetation management and climate change. We engage in restoration and enhancement projects and collaborate with communities and environmental stakeholders to implement projects, such as habitat restoration activities that support rare, threatened or endangered species.
NGOs	Relevant, always included	Exelon collaborates with environmental NGOs and wildlife organizations to preserve, protect and restore sensitive habitats (e.g., Wildlife Habitat Council, Ducks Unlimited, Partnership for the Delaware Estuary, Trout Unlimited, Water Resources Association for the Delaware River Basin, The Nature Conservancy, American Rivers, Lower Susquehanna Heritage Greenway, Alliance for the Chesapeake Bay, Chesapeake Bay Trust, Waterfront Partnership of Baltimore, Blue Water Baltimore, and over 100 others). We are implementing comprehensive environmental stewardship strategies that will provide long-term guidance for identifying and addressing priority issues relevant to our business objectives and key stakeholder interests within watersheds such as the Chesapeake Bay and others. Exelon's operational footprint in the Chesapeake Bay watershed has grown in recent years because of the 2012 and 2016 mergers with Constellation Energy and Pepco Holdings, Inc., and their operations in Delaware, Maryland, New Jersey and the District of Columbia. Developing a thorough understanding of issues, opportunities and trends within the Chesapeake Bay watershed that affect Exelon's business is essential to maintaining operations and continuing to provide clean, reliable power to our customers while also ensuring the sustainability of the water resources in the communities we serve.

Other water users at a basin/catchment level	Relevant, always included	Our Wolf Hollow II facility in Texas, which utilizes dry-cooling technology, withdraws a limited amount cooling water from Lake Granbury. The lake has a variety of water users and has experienced reduced water levels in the past; however, since the 2015 and subsequent rainfall events, the lake levels have remained at or above 95%. The intake extension project at Wolf Hollow II will ensure the facility's cooling water needed for continued operations. Exelon remains in contact with the Brazos River Authority to discuss near and long-term water supply aspects. The likelihood of an event restricting Wolf Hollow II operations in the near-term is low, given the Authority’s forecasts that no curtailment of water service is expected.
Regulators	Relevant, always included	Environmental risk assessment is included as part of facility permitting and relicensing activities, as well as public policy advocacy. Exelon engages with regulators and public policy makers in assessing water risk. For example, Exelon remains in contact with the Brazos River Authority to discuss near and long-term water availability. The likelihood of an event restricting Wolf Hollow II operations in the near-term is low, given the Authority’s forecasts that no curtailment of water service is expected. Use of dry cooling technology at the facility, reduces its water consumption compared to traditional water-cooled technology.
River basin management authorities	Relevant, always included	Exelon has dockets with both the Susquehanna River and Delaware River Commissions. Our Limerick power station has an emergency mine water release agreement with the Delaware River Basin Commission for drought conditions. Merrill Creek Reservoir, of which Exelon is an owner, provides flow augmentation to the Delaware River watershed and subsequently Exelon's facilities during drought emergencies declared by the Delaware River Basin Commission. We also participate in local watershed advisory committees and boards to assist external stakeholders with sustainability management.
Statutory special interest groups at a local level	Relevant, always included	Relicensing Conowingo and Muddy Run hydro projects required identification of stakeholders of record; over 47 studies were completed with input from stakeholders. At our Limerick nuclear facility, Exelon collaborated with numerous regulatory agencies and environmental stakeholders to develop a flow augmentation alternative to be used to supplement flow in the Schuylkill River. We also participate in local watershed advisory committees and boards to assist external stakeholders with sustainability management.
Suppliers	Relevant, always included	As a large purchaser with the potential to influence the sustainability practices of our suppliers, we are active in industry and government efforts to improve supply chain operations. As one of the founders of the Electric Utility Industry Sustainable Supply Chain Alliance, Exelon has helped develop industry standards for evaluating the environmental impacts of key materials and services as well as performance metrics for suppliers. Exelon

		performs evaluations of supplier risks, including water treatment chemicals, including the risk to Exelon if suppliers were to experience business interruption, compliance issues, operations disruptions and other types of risks, as well as mitigation strategy and a risk measurement metric. This is true during NPDES renewal application activities such as those recently completed at our Benning Road and Peach Bottom facilities where both adequate supplies of materials and access to qualified consultants to support our permit processes are necessary for consistent and reliable operations. Suppliers are evaluated for their risk and resilience to various impacts including extreme weather events including snow, ice, hurricanes and floods.
Water utilities at a local level	Relevant, always included	Constellation, an Exelon business, is working with water utilities to assess their risk and address energy efficiency and resilience issues through our water and energy efficiency, renewables and load management products and services. For example: Constellation operates a 13.8 MW renewable energy plant at DC Water's Blue Plains Advanced Wastewater Treatment Plant, and Constellation has entered into an agreement with the City of Los Angeles (with Exelon Power as EPC and operator) for a 27-megawatt (MW) renewable energy power plant at L.A. Sanitation's Hyperion Water Treatment Plant which was placed in service on April 29, 2017. Aquify, a wholly-owned subsidiary of Exelon, provides cities and municipalities across the U.S. with technology and data analytics to manage their aging water infrastructure. Exelon delivers electricity and natural gas to approximately 10 million customers in Delaware, the District of Columbia, Illinois, Maryland, New Jersey and Pennsylvania through its Atlantic City Electric, BGE, ComEd, Delmarva Power, PECO and Pepco subsidiaries. Our utilities led the Smart Grid revolution—installing sensors and meters and deploying advanced analytics and automation resulting in unprecedented reliability, resilience and responsiveness. Aquify is leveraging Exelon's vast knowledge, experience, people and assets to help water utilities operate more proactively and efficiently.
Other stakeholder, please specify	Relevant, always included	Constellation's core business is assisting customers to assess risk and manage energy-related issues that reduce energy consumption and cost, while improving reliability. We are accredited by the National Association of Energy Service Companies (NAESCO) as an "Energy Services Provider" and hold a number of IDIQ contracts with DOE, GSA and DOD and various state governments.

W3.3d

(W3.3d) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

Exelon has a formal program established for identifying, assessing and managing risks as part of its overall management model. Water-related risks at the facility level are communicated internally per a corporate policy for planning and risk abatement. Our Risk Management Program supports governance and oversight of risk management; identification, measurement and prioritization of significant risks across Exelon on a periodic basis; management of risks; communication of risk information to senior management and the board of directors; and evaluation of compliance with risk policy and the effectiveness of the policy. Annual objectives and targets are established in compliance with our certified ISO 14001 EMS for addressing environmental risks. Operating companies and business units are responsible for establishing their own risk policies that satisfy the guiding principles of the Exelon Risk Policy (RK-AC-01). To identify locations of our U.S. generation fleet regarding water stress regions, we use the WRI Aqueduct tool. The Executive Committee has established a Drought Monitoring Task Force that spans various business units. The Drought Task Force recommends regulatory, operational and technical solutions and points out areas of concern and potential impacts. To address changing waterbody conditions due to climate change challenges, Exelon is installing monitoring systems in water stress areas to increase data availability, trending and station response times. Our thermal models update 12 times/day and incorporate 30,000 data points. Exelon is a member of the EUISSCA, which is developing voluntary procurement standards and promoting supply chain environmental management practices, including environmental compliance and water use and we evaluate our suppliers against a list of environmental criteria to evaluate them.

W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes, only within our direct operations

W4.1a

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

Exelon and its subsidiaries are subject to comprehensive and complex legislation regarding environmental matters by the federal government and various state and local jurisdictions in which they operate their facilities, including environmental regulations administered by the EPA and various state and local environmental protection agencies. Federal, state and local regulation includes the authority to regulate air, water, and solid and hazardous

waste disposal. These laws and regulations affect the manner in which we conduct our operations and make capital expenditures including how we handle air emissions and water withdrawals and discharges, and solid waste disposal. Violations of these requirements could subject Exelon to enforcement actions, capital expenditures to bring existing facilities into compliance, additional operating costs for remediation and clean-up costs, civil penalties and exposure to third-parties' claims for alleged health or property damages or operating restrictions to achieve compliance.

The Exelon Board of Directors is responsible for overseeing the management of environmental matters related to our direct operations. Exelon has a management team to address environmental compliance and strategy, including the CEO; the Chief Sustainability Officer; the Senior Vice President, Competitive Market Policy; and the Vice President of Environmental Strategy, as well as senior management of the Utility Registrants. Performance of those individuals directly involved in environmental compliance and strategy is reviewed and affects compensation as part of the annual individual performance review process. The Exelon Board of Directors has delegated to its Generation Oversight Committee and the Corporate Governance Committee the authority to oversee Exelon's compliance with health, environmental and safety laws and regulations and its strategies and efforts to protect and improve the quality of the environment, including Exelon's internal climate change and sustainability policies and programs. The respective Boards of the Utility Registrants oversee environmental, health and safety issues related to these companies. Under the federal Clean Water Act, NPDES permits for discharges into waterways are required to be obtained from the EPA or from the state environmental agency to which the permit program has been delegated and must be renewed periodically. Certain of Exelon's facilities discharge storm water and industrial wastewater into waterways and are therefore subject to these regulations and operate under NPDES permits or pending applications for renewals of such permits after being granted an administrative extension. Generation is also subject to the jurisdiction of the Delaware River Basin Commission and the Susquehanna River Basin Commission, regional agencies that primarily regulate water use. Generation's operations are also affected by weather, which affects demand for electricity as well as operating conditions. To the extent that weather is warmer in the summer or colder in the winter than assumed, Generation could require greater resources to meet its contractual commitments. Extreme weather conditions or storms could affect the availability of generation and its transmission, limiting Generation's ability to source or send power to where it is sold. In addition, drought-like conditions limiting water usage could impact Generation's ability to run certain generating assets at full capacity. These conditions, which cannot be accurately predicted or estimated, could cause Generation to seek additional capacity at a time when wholesale markets are tight or to seek to sell excess capacity at a time when markets are weak. Our company's Enterprise Risk Management Policy (RK-AC-1) describes strategic risk as the potential business and economic impact arising from adverse business decisions, ineffective corporate and business strategy execution, and failure to keep pace with industry and technological changes, and understand business concentrations. The policy describes financial risk as the potential business and economic impact resulting from adverse market price and interest rate movements, counterparty non-performance, liquidity constraints (e.g. unexpected cash outflows, illiquid markets), and inappropriate debt and/or equity levels.

W4.1b

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	8	1-25	We have no facilities with exposure to risks arising from overall water stress as determined by an analysis of the WRI Aqueduct Water Stress Atlas for the electric power sector. Aqueduct provides an aggregated measure of 13 global water stress indicators weighted according to use factors for the power industry, including water quantity and quality. The risks addressed here and in subsequent related sections arises from the regulation of cooling water withdrawals under Clean Water Act Section316(b) and USEPA's implementing regulations (316(b) rule). Section 316(b) requires that the cooling water intake structures at electric power plants reflect the best technology available to minimize adverse environmental impacts and is implemented through state-level NPDES permit programs. All of Generation's power generation facilities with cooling water systems are subject to the regulations. Facilities without closed-cycle recirculating systems (e.g., cooling towers) are potentially most affected by USEPA's 2014 changes to the regulations.

W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?

Country/Area & River basin

United States of America

Other, please specify

Chesapeake Bay

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's annual electricity generation that could be affected by these facilities

1-25

% company's total global revenue that could be affected

Less than 1%

Comment

Calvert Cliffs Nuclear Power Plant

Country/Area & River basin

United States of America

Mississippi River

Number of facilities exposed to water risk

3

% company-wide facilities this represents

1-25

% company's annual electricity generation that could be affected by these facilities

1-25

% company's total global revenue that could be affected

1-10

Comment

Clinton Nuclear Power Station, Dresden Generating Station, Quad Cities Nuclear Power Generating Station

Country/Area & River basin

United States of America

Susquehanna River

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

% company's annual electricity generation that could be affected by these facilities

1-25

% company's total global revenue that could be affected

Less than 1%

Comment

Peach Bottom Atomic Power Station

Country/Area & River basin

United States of America

Other, please specify

Lake Ontario

Number of facilities exposed to water risk

3

% company-wide facilities this represents

1-25

% company's annual electricity generation that could be affected by these facilities

1-25

% company's total global revenue that could be affected

1-10

Comment

Nine Mile Point Nuclear Station, Ginna Nuclear Power Plant, James A. Fitzpatrick Nuclear Power Plant

W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Area & River basin

United States of America

Other, please specify

Chesapeake Bay

Type of risk & Primary risk driver

Regulatory

Mandatory water efficiency, conservation, recycling or process standards

Primary potential impact

Upfront costs to adopt/deploy new practices and processes

Company-specific description

Calvert Cliffs Nuclear Power Plant

Timeframe

4-6 years

Magnitude of potential impact

Medium-low

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

USEPA's 316(b) rule requires that a series of studies and analyses be performed to determine the best technology available to minimize adverse impacts on aquatic life, followed by an implementation period for the selected technology. The timing of the various requirements for each facility is related to the status of its current NPDES permit and the subsequent renewal period. There is no fixed compliance schedule, as this is left to the discretion of the state permitting director. Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes

state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

Section 316(b) requires that the cooling water intake structures at electric power plants reflect the best technology available to minimize adverse environmental impacts and is implemented through state-level NPDES permit programs. All of Generation's power generation facilities with cooling water systems are subject to the regulations. Facilities without closed-cycle recirculating systems (e.g., cooling towers) are potentially most affected by recent changes to the regulations.

Cost of response

Explanation of cost of response

Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Country/Area & River basin

United States of America
Mississippi River

Type of risk & Primary risk driver

Regulatory

Mandatory water efficiency, conservation, recycling or process standards

Primary potential impact

Upfront costs to adopt/deploy new practices and processes

Company-specific description

Clinton Nuclear Power Station

Timeframe

4-6 years

Magnitude of potential impact

Medium-low

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

USEPA’s 316(b) rule requires that a series of studies and analyses be performed to determine the best technology available to minimize adverse impacts on aquatic life, followed by an implementation period for the selected technology. The timing of the various requirements for

each facility is related to the status of its current NPDES permit and the subsequent renewal period. There is no fixed compliance schedule, as this is left to the discretion of the state permitting director. Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

Section 316(b) requires that the cooling water intake structures at electric power plants reflect the best technology available to minimize adverse environmental impacts and is implemented through state-level NPDES permit programs. All of Generation's power generation facilities with cooling water systems are subject to the regulations. Facilities without closed-cycle recirculating systems (e.g., cooling towers) are potentially most affected by recent changes to the regulations.

Cost of response

Explanation of cost of response

Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Country/Area & River basin

United States of America

Mississippi River

Type of risk & Primary risk driver

Regulatory

Mandatory water efficiency, conservation, recycling or process standards

Primary potential impact

Upfront costs to adopt/deploy new practices and processes

Company-specific description

Dresden Generating Station

Timeframe

4-6 years

Magnitude of potential impact

Medium-low

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

USEPA's 316(b) rule requires that a series of studies and analyses be performed to determine the best technology available to minimize adverse impacts on aquatic life, followed by an implementation period for the selected technology. The timing of the various requirements for each facility is related to the status of its current NPDES permit and the subsequent renewal period. There is no fixed compliance schedule, as this is left to the discretion of the state permitting director. Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

Section 316(b) requires that the cooling water intake structures at electric power plants reflect the best technology available to minimize adverse environmental impacts and is implemented through state-level NPDES permit programs. All of Generation's power generation facilities with cooling water systems are subject to the regulations. Facilities without closed-cycle recirculating systems (e.g., cooling towers) are potentially most affected by recent changes to the regulations.

Cost of response

Explanation of cost of response

Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations,

cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Country/Area & River basin

United States of America
Mississippi River

Type of risk & Primary risk driver

Regulatory
Mandatory water efficiency, conservation, recycling or process standards

Primary potential impact

Upfront costs to adopt/deploy new practices and processes

Company-specific description

Quad Cities Nuclear Generating Station

Timeframe

4-6 years

Magnitude of potential impact

Medium-low

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

USEPA's 316(b) rule requires that a series of studies and analyses be performed to determine the best technology available to minimize adverse impacts on aquatic life, followed by an implementation period for the selected technology. The timing of the various requirements for each facility is related to the status of its current NPDES permit and the subsequent renewal period. There is no fixed compliance schedule, as this is left to the discretion of the state permitting director. Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

Section 316(b) requires that the cooling water intake structures at electric power plants reflect the best technology available to minimize adverse environmental impacts and is implemented through state-level NPDES permit programs. All of Generation's power generation facilities with cooling water systems are subject to the regulations. Facilities without closed-cycle recirculating systems (e.g., cooling towers) are potentially most affected by recent changes to the regulations.

Cost of response

Explanation of cost of response

Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Country/Area & River basin

United States of America
Susquehanna River

Type of risk & Primary risk driver

Regulatory
Mandatory water efficiency, conservation, recycling or process standards

Primary potential impact

Upfront costs to adopt/deploy new practices and processes

Company-specific description

Peach Bottom Atomic Power Station

Timeframe

4-6 years

Magnitude of potential impact

Medium-low

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

USEPA's 316(b) rule requires that a series of studies and analyses be performed to determine the best technology available to minimize adverse impacts on aquatic life, followed by an implementation period for the selected technology. The timing of the various requirements for each facility is related to the status of its current NPDES permit and the subsequent renewal period. There is no fixed compliance schedule, as this is left to the discretion of the state permitting director. Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

Section 316(b) requires that the cooling water intake structures at electric power plants reflect the best technology available to minimize adverse environmental impacts and is implemented through state-level NPDES permit programs. All of Generation's power generation facilities with cooling water systems are subject to the regulations. Facilities without closed-cycle recirculating systems (e.g., cooling towers) are potentially most affected by recent changes to the regulations.

Cost of response

Explanation of cost of response

Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Country/Area & River basin

United States of America

Other, please specify

Lake Ontario

Type of risk & Primary risk driver

Regulatory

Mandatory water efficiency, conservation, recycling or process standards

Primary potential impact

Upfront costs to adopt/deploy new practices and processes

Company-specific description

Nine Mile Point Nuclear Station

Timeframe

4-6 years

Magnitude of potential impact

Medium-low

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

USEPA's 316(b) rule requires that a series of studies and analyses be performed to determine the best technology available to minimize adverse impacts on aquatic life, followed by an implementation period for the selected technology. The timing of the various requirements for each facility is related to the status of its current NPDES permit and the subsequent renewal period. There is no fixed compliance schedule, as this is left to the discretion of the state permitting director. Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes

state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

Section 316(b) requires that the cooling water intake structures at electric power plants reflect the best technology available to minimize adverse environmental impacts and is implemented through state-level NPDES permit programs. All of Generation's power generation facilities with cooling water systems are subject to the regulations. Facilities without closed-cycle recirculating systems (e.g., cooling towers) are potentially most affected by recent changes to the regulations.

Cost of response

Explanation of cost of response

In July 2011, the New York Department of Environmental Conservation (DEC) issued a policy regarding the best available technology for cooling water intake structures. Through its policy, the DEC established closed-cycle cooling or its equivalent as the performance goal for all existing facilities, but also provided that the DEC will select a feasible technology whose costs are not wholly disproportionate to the environmental benefits to be gained and allows for a site-specific determination where the entrainment performance goal cannot be achieved (i.e. the requirement most likely to support cooling towers). The Ginna, Nine Mile Point Unit 1 and Fitzpatrick power generation facilities have received renewals of their state water discharge permits and cooling towers were not required. These facilities are now engaged in the required analyses to enable the environmental agency to determine the best technology available in the next permit renewal cycles. Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Country/Area & River basin

United States of America

Other, please specify

Lake Ontario

Type of risk & Primary risk driver

Regulatory

Mandatory water efficiency, conservation, recycling or process standards

Primary potential impact

Upfront costs to adopt/deploy new practices and processes

Company-specific description

Ginna Nuclear Power Plant

Timeframe

4-6 years

Magnitude of potential impact

Medium-low

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

USEPA's 316(b) rule requires that a series of studies and analyses be performed to determine the best technology available to minimize adverse impacts on aquatic life, followed by an implementation period for the selected technology. The timing of the various requirements for each facility is related to the status of its current NPDES permit and the subsequent renewal period. There is no fixed compliance schedule, as this is left to the discretion of the state permitting director. Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

Section 316(b) requires that the cooling water intake structures at electric power plants reflect the best technology available to minimize adverse environmental impacts and is implemented through state-level NPDES permit programs. All of Generation's power generation facilities with cooling water systems are subject to the regulations. Facilities without closed-cycle recirculating systems (e.g., cooling towers) are potentially most affected by recent changes to the regulations.

Cost of response

Explanation of cost of response

In July 2011, the New York Department of Environmental Conservation (DEC) issued a policy regarding the best available technology for cooling water intake structures. Through its policy, the DEC established closed-cycle cooling or its equivalent as the performance goal for all existing facilities, but also provided that the DEC will select a feasible technology whose costs are not wholly disproportionate to the environmental benefits to be gained and allows for a site-specific determination where the entrainment performance goal cannot be achieved (i.e. the requirement most likely to support cooling towers). The Ginna, Nine Mile Point Unit 1 and Fitzpatrick power generation facilities have received renewals of their state water discharge permits and cooling towers were not required. These facilities are now engaged in the required analyses to enable the environmental agency to determine the best technology available in the next permit renewal cycles. Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Country/Area & River basin

United States of America

Other, please specify

Lake Ontario

Type of risk & Primary risk driver

Regulatory

Mandatory water efficiency, conservation, recycling or process standards

Primary potential impact

Upfront costs to adopt/deploy new practices and processes

Company-specific description

Fitzpatrick Nuclear Power Plant

Timeframe

4-6 years

Magnitude of potential impact

Medium-low

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

USEPA's 316(b) rule requires that a series of studies and analyses be performed to determine the best technology available to minimize adverse impacts on aquatic life, followed by an implementation period for the selected technology. The timing of the various requirements for each facility is related to the status of its current NPDES permit and the subsequent renewal period. There is no fixed compliance schedule, as this is left to the discretion of the state permitting director. Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required

to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

Section 316(b) requires that the cooling water intake structures at electric power plants reflect the best technology available to minimize adverse environmental impacts and is implemented through state-level NPDES permit programs. All of Generation's power generation facilities with cooling water systems are subject to the regulations. Facilities without closed-cycle recirculating systems (e.g., cooling towers) are potentially most affected by recent changes to the regulations.

Cost of response

Explanation of cost of response

In July 2011, the New York Department of Environmental Conservation (DEC) issued a policy regarding the best available technology for cooling water intake structures. Through its policy, the DEC established closed-cycle cooling or its equivalent as the performance goal for all existing facilities, but also provided that the DEC will select a feasible technology whose costs are not wholly disproportionate to the environmental benefits to be gained and allows for a site-specific determination where the entrainment performance goal cannot be achieved (i.e. the requirement most likely to support cooling towers). The Ginna, Nine Mile Point Unit 1 and Fitzpatrick power generation facilities have received renewals of their state water discharge permits and cooling towers were not required. These facilities are now engaged in the required analyses to enable the environmental agency to determine the best technology available in the next permit renewal cycles. Until the compliance requirements are determined by the applicable state permitting director on a site-specific basis for each plant, Generation cannot estimate the effect that compliance with the rule will have on the operation of its generating facilities and its future results of operations, cash flows, and financial position. Should a state permitting director determine that a facility must install cooling towers to comply with the rule, that facility's economic viability could be called into question. However, the 316(b) rule does not mandate cooling towers, identifies other technologies that are presumptively compliant with impingement requirements, and authorizes state permitting directors to apply best professional judgment in determining entrainment requirements. The state permitting director is required to consider costs and benefits of candidate technologies and can take into consideration site-specific factors, such as those that would make cooling towers infeasible.

W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	Over 90% of the Exelon's commodities spend is on non-fuel goods and services secured from U.S. domestic companies. Less than 10% of this spend is from non-domestic sources for which there are identified alternative suppliers, helping to mitigate risk from water constrained areas. Review of the supplier's business continuity and readiness plans are required for sole source contracts. Fuels are procured outside of Exelon's supply chain and are reliant upon pipeline gas and nuclear fuel.

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Type of opportunity

Products and services

Primary water-related opportunity

Reduced impact of product use on water resources

Company-specific description & strategy to realize opportunity

FERC issued a 40-year operating license for Muddy Run on December 22, 2015. On March 19, 2021, the Federal Energy Regulatory Commission (FERC) issued a new 50-year license for Exelon Generation's Conowingo hydroelectric facility, effective March 1, 2021. The new license incorporates conditions agreed to in settlements involving Exelon, the Department of Interior and the Maryland Department of the Environment (MDE). In connection with the relicensing process, Exelon contributed $3.5 million to conduct a study of the impacts of sediment transport on water quality in the Susquehanna River and Chesapeake Bay. Also related to the relicensing process, Exelon and the state of Maryland reached an agreement under which Exelon will invest $200 million in environmental measures to benefit the Susquehanna River, and, by extension, the Chesapeake Bay. That includes $41 million to reduce the amount of trash and debris passing through the dam toward the bay, $47 million for projects to increase populations of grasses and oysters and $500,000 to study issues related to sediment behind the dam.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

200,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

Exelon and the state of Maryland reached an agreement under which Exelon will invest $200 million in environmental measures to benefit the Susquehanna River, and, by extension, the Chesapeake Bay. This agreement is incorporated into the new 50-year license issued by the FERC for Exelon Generation's Conowingo hydroelectric facility, effective March 1, 2021.

Type of opportunity

Markets

Primary water-related opportunity

Improved community relations

Company-specific description & strategy to realize opportunity

FERC issued a 40-year operating license for Muddy Run on December 22, 2015. On March 19, 2021, the Federal Energy Regulatory Commission (FERC) issued a new 50-year license for Exelon Generation's Conowingo hydroelectric facility, effective March 1, 2021. The new license incorporates conditions agreed to in settlements involving Exelon, the Department of Interior and the Maryland Department of the Environment (MDE). In connection with the relicensing process, Exelon contributed $3.5 million to conduct a study of the impacts of sediment transport on water quality in the Susquehanna River and Chesapeake Bay. Also related to the relicensing process, Exelon and the state of Maryland have reached an agreement under which Exelon will invest $200 million in environmental measures to benefit the Susquehanna River, and, by extension, the Chesapeake Bay. That includes $41 million to reduce the amount of trash and debris passing through the dam toward the bay, $47 million for projects to increase populations of grasses and oysters and $500,000 to study issues related to sediment behind the dam.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

200,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

Exelon and the state of Maryland reached an agreement under which Exelon will invest $200 million in environmental measures to benefit the Susquehanna River, and, by extension, the Chesapeake Bay. This agreement is incorporated into the new 50-year license issued by the FERC for Exelon Generation's Conowingo hydroelectric facility, effective March 1, 2021.

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

Exelon strives to respond to customer demand for renewables that in turn consume less water than conventional power generation. Our strategy is to continue to provide innovative solutions to help customers meet their energy needs. Governments, businesses and non-profit organizations can develop sustainable and responsible strategies that account for this “triple bottom line” by using green technologies such as solar and wind power. Our current wind fleet includes 721 utility-scale wind turbines totalling 746 MW operating at project locations across 10 states. Maintaining strong operating performance serves to sustain and improve competitive advantage, brand value and shareholder value.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The impact has not been quantified financially.

Type of opportunity

Products and services

Primary water-related opportunity

Sales of new products/services

Company-specific description & strategy to realize opportunity

Exelon strives to respond to customer demand for renewables that in turn consume less water than conventional power generation. Our strategy is to continue to provide innovative solutions to help customers meet their energy needs. Governments, businesses and non-profit organizations can develop sustainable and responsible strategies that account for this “triple bottom line” by using green technologies such as solar and wind power. Our current wind fleet includes 721 utility-scale wind turbines totalling 746 MW operating at project locations across 10 states. Maintaining strong operating performance serves to sustain and improve competitive advantage, brand value and shareholder value.

Estimated timeframe for realization

4 to 6 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The impact has not been quantified financially.

Type of opportunity

Resilience

Primary water-related opportunity

Other, please specify

Distributed energy and advanced infrastructure

Company-specific description & strategy to realize opportunity

Exelon's utilities are investing $26.7 billion from 2021 to 2024 to improve reliability and resilience and we use this investment as our measure of performance. Each of Exelon's utilities is currently focused on demonstrating the potential for connected communities within each of its service territories. We define a connected community as one that harnesses the power of digital communication, remote sensing, distributed and artificial intelligence, distributed energy resources (DER) and the platform of smart infrastructure to reinforce human connections and serve a hierarchy of community needs ranging from the traditional basic T&D services to new uses for utility systems enabled by technology. ComEd is working with the Bronzeville community on Chicago’s near south side which includes a mix of homes, small and large businesses, churches, schools and critical facilities such as hospitals and the Chicago Police Department headquarters. Anchoring this connected community is a

seven MW microgrid funded in part by the Department of Energy (DOE). A community energy portal shares energy efficiency savings, smart kiosks, off-grid renewable outdoor lighting and moisture and air quality sensing with interested viewers.

Estimated timeframe for realization

4 to 6 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The impact has not been quantified financially.

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

Through our Constellation business, we provide a wide array of sustainability consulting that includes water and energy efficiency services to manage water use and energy costs. The services provided range from long-term performance contracts to design-build services structured through flexible contracts. There is very little water use in our solar and wind operations, which are located mainly in the west, where water stress is a more important issue relative to the east. Federal government, state & local government, public housing authorities, healthcare, education, and commercial customers have turned to us for more than 25 years to evaluate existing energy infrastructure and usage and develop customized energy management strategies. Providing value to our customers through a variety of products and services increases brand value and shareholder value.

Estimated timeframe for realization

4 to 6 years

Magnitude of potential financial impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The impact has not been quantified financially.

Type of opportunity

Products and services

Primary water-related opportunity

Sales of new products/services

Company-specific description & strategy to realize opportunity

Through our Constellation business, we provide a wide array of sustainability consulting that includes water and energy efficiency services to manage water use and energy costs. The services provided range from long-term performance contracts to design-build services structured through flexible contracts. There is very little water use in our solar and wind operations, which are located mainly in the west, where water stress is a more important issue relative to the east. Federal government, state & local government, public housing authorities, healthcare, education, and commercial customers have turned to us for more than 25 years to evaluate existing energy infrastructure and usage and develop customized energy management strategies. Providing value to our customers through a variety of products and services increases brand value and shareholder value.

Estimated timeframe for realization

4 to 6 years

Magnitude of potential financial impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The impact has not been quantified financially.

Type of opportunity

Markets

Primary water-related opportunity

Stronger competitive advantage

Company-specific description & strategy to realize opportunity

Through our Constellation business, we provide a wide array of sustainability consulting that includes water and energy efficiency services to manage water use and energy costs. The services provided range from long-term performance contracts to design-build services structured through flexible contracts. There is very little water use in our solar and wind operations, which are located mainly in the west, where water stress is a more important issue relative to the east. Federal government, state & local government, public housing authorities, healthcare, education, and commercial customers have turned to us for more than 25 years to evaluate existing energy infrastructure and usage and develop customized energy management strategies. Providing value to our customers through a variety of products and services increases brand value and shareholder value.

Estimated timeframe for realization

4 to 6 years

Magnitude of potential financial impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The impact has not been quantified financially.

Type of opportunity

Products and services

Primary water-related opportunity

Increased sales of existing products/services

Company-specific description & strategy to realize opportunity

The U.S. Department of Energy (DOE) sought participation from the power sector in a voluntary partnership to enhance U.S. energy security by improving the resilience of energy infrastructure to extreme weather and climate change impacts. Exelon participated in this partnership. The goal was to accelerate investment in technologies, practices, and policies that will enable a resilient 21st century energy system. Under this Partnership, owners and operators of energy assets will develop and pursue strategies to reduce climate and weather-related vulnerabilities. The scope engaged power generation as well as transmission & distribution. Exelon has undertaken a corporate-wide Climate Change Vulnerability Assessment and is developing a corporate Strategic Plan for Climate Change Resilience. The Strategic Plan is geared to support Exelon's participation in the U.S. Department of Energy Voluntary Partnership for Energy Sector Climate Resilience, fulfilling the Partnership agreement that each participating company would develop a climate change resiliency strategy. In general, the initiatives that have been implemented, which support maintaining and increasing resiliency, fall into several key areas: Investments to harden existing and new T&D infrastructure and generating plants; Enhancing emergency response programs to more effectively and efficiently restore operability following severe events; and understanding future changes to respond appropriately.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The impact has not been quantified financially.

Type of opportunity

Efficiency

Primary water-related opportunity

Cost savings

Company-specific description & strategy to realize opportunity

The U.S. Department of Energy (DOE) sought participation from the power sector in a voluntary partnership to enhance U.S. energy security by improving the resilience of energy infrastructure to extreme weather and climate change impacts. Exelon participated in this partnership. The goal was to accelerate investment in technologies, practices, and policies that will enable a resilient 21st century energy system. Under this Partnership, owners and operators of energy assets will develop and pursue strategies to reduce climate and weather-related vulnerabilities. The scope will engage power generation as well as transmission & distribution. Exelon has undertaken a corporate-wide Climate Change Vulnerability Assessment and is developing a corporate Strategic Plan for Climate Change Resilience. The Strategic Plan is geared to support Exelon's participation in the U.S. Department of Energy Voluntary Partnership for Energy Sector Climate Resilience, fulfilling the Partnership agreement that each participating company would develop a climate change resiliency strategy. In general, the initiatives that have been

implemented, which support maintaining and increasing resiliency, fall into several key areas: Investments to harden existing and new T&D infrastructure and generating plants; Enhancing emergency response programs to more effectively and efficiently restore operability following severe events; and understanding future changes to respond appropriately.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The impact has not been quantified financially.

Type of opportunity

Resilience

Primary water-related opportunity

Increased resilience to impacts of climate change

Company-specific description & strategy to realize opportunity

The U.S. Department of Energy (DOE) sought participation from the power sector in a voluntary partnership to enhance U.S. energy security by improving the resilience of energy infrastructure to extreme weather and climate change impacts. Exelon participated in this partnership. The goal was to accelerate investment in technologies, practices, and policies that will enable a resilient 21st century energy system. Under this Partnership, owners and operators of energy assets will develop and pursue strategies to reduce climate and weather-related vulnerabilities. The scope will engage power generation as well as transmission & distribution. Exelon has undertaken a corporate-wide Climate Change Vulnerability Assessment and is developing a corporate Strategic Plan for Climate Change Resilience. The Strategic Plan is geared to support Exelon's participation in the U.S. Department of Energy Voluntary Partnership for Energy Sector Climate Resilience, fulfilling the Partnership agreement that each participating company would develop a climate change resiliency strategy. In general, the initiatives that have been implemented, that support maintaining and increasing resiliency, fall into several key areas: Investments to harden existing and new T&D infrastructure and generating plants; Enhancing emergency response programs to more effectively and efficiently restore operability following severe events; and understand future changes to respond appropriately.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The impact has not been quantified financially.

Type of opportunity

Markets

Primary water-related opportunity

Improved customer satisfaction

Company-specific description & strategy to realize opportunity

The U.S. Department of Energy (DOE) sought participation from the power sector in a voluntary partnership to enhance U.S. energy security by improving the resilience of energy infrastructure to extreme weather and climate change impacts. Exelon participated in this partnership. The goal was to accelerate investment in technologies, practices, and policies that will enable a resilient 21st century energy system. Under this Partnership, owners and operators of energy assets will develop and pursue strategies to reduce climate and weather-related vulnerabilities. The scope will engage power generation as well as transmission & distribution. Exelon has undertaken a corporate-wide Climate Change Vulnerability Assessment and is developing a corporate Strategic Plan for Climate Change Resilience. The Strategic Plan is geared to support Exelon's participation in the U.S. Department of Energy Voluntary Partnership for Energy Sector Climate Resilience, fulfilling the Partnership agreement that each participating company would develop a climate change resiliency strategy. In general, the initiatives that have been implemented, which support maintaining and increasing resiliency, fall into several key areas: Investments to harden existing and new T&D infrastructure and generating plants; Enhancing emergency response programs to more effectively and efficiently restore operability following severe events; and understanding future changes to respond appropriately.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The impact has not been quantified financially.

Type of opportunity

Products and services

Primary water-related opportunity

Sales of new products/services

Company-specific description & strategy to realize opportunity

Water is a sizeable adjacent market for Exelon. The inter-relationship of electricity and water creates opportunities for Exelon to leverage existing assets and competences to create value. Exelon utilizes an internal matrixed group of experts who work on developing energy innovation businesses, including emergent technologies and market evaluation of the water-energy nexus. Some of the areas that are being investigated include environmental stewardship activities to enhance natural ecosystem services such as water filtration through wetlands, riparian buffers and bioretention areas. Another area of investigation is proactive storm water management through evaluation of impervious surfaces and best management practices that can not only reduce storm water volume, but also improve storm water quality. Aquify, a wholly-owned subsidiary of Exelon Corporation, is using Exelon’s vast knowledge, experience, people and assets to help water utilities operate more proactively and efficiently. Aquify leverages Exelon’s experience and expertise in power and gas distribution and applies it to the infrastructure that delivers water. Like the "smart" electrical grid that uses technology to identify power outages and coordinate faster repairs, Aquify uses sensors along miles of the underground water supply network to identify and address maintenance needs and emerging issues. Often, if a water pipe starts leaking, it goes unnoticed until the water rises to the surface or pressure gradually builds up in and around the pipe until it breaks.

Aquify is partnering with municipal water utilities to install cutting-edge sensors that constantly measure and monitor key metrics to identify where and when an event occurs. Those sensors are then combined with artificial intelligence (AI) software, a cybersecure network and 24/7 monitoring and analytics resources into a turnkey professional service for water utilities.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The impact has not been quantified financially.

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

Water is a sizeable adjacent market for Exelon. The inter-relationship of electricity and water creates opportunities for Exelon to leverage existing assets and competences to create value. Exelon utilizes an internal matrixed group of experts who work on developing energy innovation businesses, including emergent technologies and market evaluation of the water-energy nexus. Some of the areas that are being investigated include environmental stewardship activities to enhance natural ecosystem services such as water filtration through wetlands, riparian buffers and bioretention areas. Another area of investigation is proactive storm water management through evaluation of impervious surfaces and best management practices that can not only reduce storm water volume, but also improve storm water quality. Aquify, a wholly-owned subsidiary of Exelon Corporation, is using Exelon's vast knowledge, experience, people and assets to help water utilities operate more proactively and efficiently. Aquify leverages Exelon's experience and expertise in power and gas distribution and applies it to the infrastructure that delivers water. Like the "smart" electrical grid that uses technology to identify power outages and coordinate faster repairs, Aquify uses sensors along miles of the underground water supply network to identify and address maintenance needs and emerging issues. Often, if a water pipe starts leaking, it goes unnoticed until the water rises to the surface or pressure gradually builds up in and around the pipe until it breaks. Aquify is partnering with municipal water utilities to install cutting-edge sensors that constantly measure and monitor key metrics to identify where and when an event occurs. Those sensors are then combined with artificial intelligence (AI) software, a cybersecure network and 24/7 monitoring and analytics resources into a turnkey professional service for water utilities.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The impact has not been quantified financially.

Type of opportunity

Markets

Primary water-related opportunity

Stronger competitive advantage

Company-specific description & strategy to realize opportunity

Water is a sizeable adjacent market for Exelon. The inter-relationship of electricity and water creates opportunities for Exelon to leverage existing assets and competences to create value. Exelon utilizes an internal matrixed group of experts who work on developing energy innovation businesses, including emergent technologies and market evaluation of the water-energy nexus. Some of the areas that are being investigated include environmental stewardship activities to enhance natural ecosystem services such as water filtration through wetlands, riparian buffers and bioretention areas. Another area of investigation is proactive storm water management through evaluation of impervious surfaces and best management practices that can not only reduce storm water volume, but also improve storm water quality. Aquify is a wholly-owned subsidiary of Exelon Corporation, the nation's largest power and gas utility operator and leading competitive energy provider. Exelon's six utilities deliver electricity and natural gas to approximately 10 million customers in Delaware, the District of Columbia, Illinois, Maryland, New Jersey and Pennsylvania through its Atlantic City Electric, BGE, ComEd, Delmarva Power, PECO and Pepco subsidiaries. Our utilities led the Smart Grid revolution—installing sensors and meters and deploying advanced analytics and automation resulting in unprecedented reliability, resilience and responsiveness. Aquify is leveraging Exelon's vast knowledge, experience, people and assets to help water utilities operate more proactively and efficiently.

Estimated timeframe for realization

More than 6 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The impact has not been quantified financially.

W5. Facility-level water accounting

W5.1

(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Facility reference number

Facility 1

Facility name (optional)

Calvert Cliffs Nuclear Power Plant

Country/Area & River basin

United States of America
Other, please specify
Chesapeake Bay

Latitude
38.43435

Longitude
-76.4418

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
Nuclear

Total water withdrawals at this facility (megaliters/year)
5,277,224

Comparison of total withdrawals with previous reporting year
Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
0

Withdrawals from brackish surface water/seawater
4,877,314

Withdrawals from groundwater - renewable
399,910

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

4,877,314

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

4,877,314

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

399,910

Comparison of total consumption with previous reporting year

Lower

Please explain

Some flows may be estimated using accepted engineering practices including mechanical specifications and mass-balance methods. Water consumption is related to evaporation from cooling systems, steam-cycle and cooling-cycle blowdown, mechanical losses and degraded flows requiring treatment before return to the source.

Facility reference number

Facility 2

Facility name (optional)

Clinton Nuclear Power Station

Country/Area & River basin

United States of America
Mississippi River

Latitude

40.17186

Longitude

-88.8359

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Total water withdrawals at this facility (megaliters/year)

1,044,388

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

1,044,388

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

1,039,167

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

1,039,167

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

5,221

Comparison of total consumption with previous reporting year

About the same

Please explain

Some flows may be estimated using accepted engineering practices including mechanical specifications and mass-balance methods. Water consumption is related to evaporation from cooling systems, steam-cycle and cooling-cycle blowdown, mechanical losses and degraded flows requiring treatment before return to the source.

Facility reference number

Facility 3

Facility name (optional)

Dresden Generating Station

Country/Area & River basin

United States of America
Mississippi River

Latitude

41.38943

Longitude

-88.287

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Total water withdrawals at this facility (megaliters/year)

669,200

Comparison of total withdrawals with previous reporting year

Lower

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

669,200

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

656,300

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

656,300

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

12,900

Comparison of total consumption with previous reporting year

Lower

Please explain

Some flows may be estimated using accepted engineering practices including mechanical specifications and mass-balance methods. Water consumption is related to evaporation from cooling systems, steam-cycle and cooling-cycle blowdown, mechanical losses and degraded flows requiring treatment before return to the source.

Facility reference number

Facility 4

Facility name (optional)

Quad Cities Nuclear Generating Station

Country/Area & River basin

United States of America
Mississippi River

Latitude

41.72619

Longitude

-90.310704

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Total water withdrawals at this facility (megaliters/year)

1,516,462

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

1,516,462

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

1,500,560

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

1,500,560

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

15,902

Comparison of total consumption with previous reporting year

About the same

Please explain

Some flows may be estimated using accepted engineering practices including mechanical specifications and mass-balance methods. Water consumption is related to evaporation from cooling systems, steam-cycle and cooling-cycling blowdown, mechanical losses and degraded flows requiring treatment before return to the source.

Facility reference number

Facility 5

Facility name (optional)

Peach Bottom Atomic Power Station

Country/Area & River basin

United States of America
Susquehanna River

Latitude

39.75917

Longitude

-76.2685

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Total water withdrawals at this facility (megaliters/year)

3,038,228

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

3,038,228

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

3,008,589

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

3,008,589

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

29,639

Comparison of total consumption with previous reporting year

Lower

Please explain

Some flows may be estimated using accepted engineering practices including mechanical specifications and mass-balance methods. Water consumption is related to evaporation from cooling systems, steam-cycle and cooling-cycle blowdown, mechanical losses and degraded flows requiring treatment before return to the source.

Facility reference number

Facility 6

Facility name (optional)

Nine Mile Point Nuclear Station

Country/Area & River basin

United States of America

Other, please specify

Lake Ontario

Latitude

43.52139

Longitude

-76.408

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Total water withdrawals at this facility (megaliters/year)

604,367

Comparison of total withdrawals with previous reporting year

Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

604,367

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

585,402

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

585,402

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

18,965

Comparison of total consumption with previous reporting year

About the same

Please explain

Some flows may be estimated using accepted engineering practices including mechanical specifications and mass-balance methods. Water consumption is related to evaporation from cooling systems, steam-cycle and cooling-cycle blowdown, mechanical losses and degraded flows requiring treatment before return to the source.

Facility reference number

Facility 7

Facility name (optional)

Ginna Nuclear Power Plant

Country/Area & River basin

United States of America

Other, please specify

Lake Ontario

Latitude

43.27761

Longitude

-77.3089

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Total water withdrawals at this facility (megaliters/year)

621,046

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

621,046

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

621,046

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

621,046

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

0

Comparison of total consumption with previous reporting year

About the same

Please explain

Some flows may be estimated using accepted engineering practices including mechanical specifications and mass-balance methods. Water consumption is related to evaporation from cooling systems, steam-cycle and cooling-cycle blowdown, mechanical losses and degraded flows requiring treatment before return to the source.

Facility reference number

Facility 8

Facility name (optional)

James A. Fitzpatrick Nuclear Power Plant

Country/Area & River basin

United States of America

Other, please specify

Lake Ontario

Latitude

43.51749

Longitude

-76.410667

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Total water withdrawals at this facility (megaliters/year)

770,373

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

770,373

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

770,373

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

770,373

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

0

Comparison of total consumption with previous reporting year

About the same

Please explain

Some flows may be estimated using accepted engineering practices including mechanical specifications and mass-balance methods. Water consumption is related to evaporation from cooling systems, steam-cycle and cooling-cycle blowdown, mechanical losses and degraded flows requiring treatment before return to the source.

W5.1a

(W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been externally verified?

Water withdrawals – total volumes

% verified

76-100

What standard and methodology was used?

We report water data to regulatory agencies (USEPA, USDOE and state agencies) in compliance with environmental permits. All reports require legally responsible company executive signatures. The method and frequency of verification are within the discretion of the regulatory agencies.

Water withdrawals – volume by source

% verified

76-100

What standard and methodology was used?

We report water data to regulatory agencies (USEPA, USDOE and state agencies) in compliance with environmental permits. All reports require legally responsible company executive signatures. The method and frequency of verification are within the discretion of the regulatory agencies.

Water withdrawals – quality

% verified

76-100

What standard and methodology was used?

We report water data to regulatory agencies (USEPA, USDOE and state agencies) in compliance with environmental permits. All reports require legally responsible company executive signatures. The method and frequency of verification are within the discretion of the regulatory agencies.

Water discharges – total volumes

% verified

76-100

What standard and methodology was used?

We report water data to regulatory agencies (USEPA, USDOE and state agencies) in compliance with environmental permits. All reports require legally responsible company executive signatures. The method and frequency of verification are within the discretion of the regulatory agencies.

Water discharges – volume by destination

% verified

76-100

What standard and methodology was used?

We report water data to regulatory agencies (USEPA, USDOE and state agencies) in compliance with environmental permits. All reports require legally responsible company executive signatures. The method and frequency of verification are within the discretion of the regulatory agencies.

Water discharges – volume by treatment method

% verified

76-100

What standard and methodology was used?

We report water data to regulatory agencies (USEPA, USDOE and state agencies) in compliance with environmental permits. All reports require legally responsible company executive signatures. The method and frequency of verification are within the discretion of the regulatory agencies.

Water discharge quality – quality by standard effluent parameters

% verified

76-100

What standard and methodology was used?

We report water data to regulatory agencies (USEPA, USDOE and state agencies) in compliance with environmental permits. All reports require legally responsible company executive signatures. The method and frequency of verification are within the discretion of the regulatory agencies.

Water discharge quality – temperature

% verified

76-100

What standard and methodology was used?

We report water data to regulatory agencies (USEPA, USDOE and state agencies) in compliance with environmental permits. All reports require legally responsible company executive signatures. The method and frequency of verification are within the discretion of the regulatory agencies.

Water consumption – total volume

% verified

76-100

What standard and methodology was used?

We report water data to regulatory agencies (USEPA, USDOE and state agencies) in compliance with environmental permits. All reports require legally responsible company executive signatures. The method and frequency of verification are within the discretion of the regulatory agencies.

Water recycled/reused

% verified

76-100

What standard and methodology was used?

We report water data to regulatory agencies (USEPA, USDOE and state agencies) in compliance with environmental permits. All reports require legally responsible company executive signatures. The method and frequency of verification are within the discretion of the regulatory agencies.

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

W6.1a

(W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water Description of business impact on water Description of water-related performance standards for direct operations Description of water-related standards for procurement Company water targets and goals Commitments beyond regulatory compliance	Exelon's Water Resources Management Policy is publicly available on our corporate website at: https://www.exeloncorp.com/sustainability/Documents/Exelon-Water-Resource-Management-Corporate-Policy.pdf. The policy guides our efforts to: institutionalize the management of water as an essential natural resource for sustained operations; continuously improve our management of water resources, prevent pollution, and comply with all applicable water use laws and regulations, with the objective of advancing water resource management beyond compliance to create or protect value; understand natural and man-made impacts on water resources, including climate change, and continuously adapt strategies and plans to address these issues; engage local and other relevant stakeholders when addressing water issues including those related to operational changes, development of strategic plans, or public policy advocacy; and, build goodwill and enhance the Exelon brand by collaborating with communities and other interested parties to address opportunities for protecting and enhancing watershed resources.

		Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	

W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?

Yes

W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Board-level committee	The Exelon board-delegated Corporate Governance Committee oversees strategies and efforts to improve the environment, including climate change and sustainability policies and programs, and strategic water issues, and provides regular updates to the full Board.

W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy	Exelon's commitment to sustainability is central to our mission of providing reliable, clean, affordable and innovative energy products. Exelon's Corporate Governance Committee oversees our efforts in this area. Our operational excellence and environmental stewardship values drive us to conduct business in a way that is sustainable for our customers, our employees and the communities in which we operate. Consistent with our Purpose statement, we are committed to building the next-generation energy company and applying innovative technologies to manage energy use and meet customer expectations for clean, reliable and affordable power. For more information about our sustainability practices, please refer to the Exelon Corporation Sustainability Report posted on our www.exeloncorp.com/sustainability. The Corporate Governance Committee, a subset of our Board of Directors, monitors governance trends and commitments, and is responsible for taking a leadership role in shaping the corporate governance practices of the Company. The Governance Committee operates via a charter that details the Committee's specific roles and responsibilities which includes overseeing the Company's strategies and efforts to protect and improve the quality of the environment, including, but not limited to, the Company's climate change and sustainability policies and programs at least quarterly or more frequently as needed when events require.

		Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives	

W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)

Chief Executive Officer (CEO)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

More frequently than quarterly

Please explain

The Corporate Governance Committee of the Board is responsible for overseeing Exelon's environmental strategies including climate change and sustainability policies and programs and for providing updates to the full Board at regularly schedules meetings. The Executive Committee, led by the President and CEO, addresses strategic water issues. Exelon’s Chief Sustainability Officer is briefed quarterly or more frequently as matters arise and is responsible for implementation of the Exelon Corporate Environment Policy, Water Resources Policy and EMS.

W6.4

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	The Exelon Board of Directors is responsible for overseeing the management of environmental matters. Exelon has a management team to address environmental compliance and strategy, including the CEO, the Corporate Chief Sustainability Officer, the Senior Vice President Regulatory Policy and Analysis, and the Vice President Environmental Strategy, as well as senior management of the Registrants. Performance of those individuals directly involved in environmental compliance and strategy is reviewed and affects compensation as part of the annual individual performance review process.

W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Please explain
Monetary reward	Corporate executive team	Reduction of water withdrawals Improvements in efficiency - direct operations Improvements in efficiency - product-use	The Exelon Board of Directors is responsible for overseeing the management of environmental matters. Exelon has a management team to address environmental compliance and strategy, including the CEO, the Corporate Chief Sustainability Officer, the Senior Vice President Regulatory Policy and Analysis, and the Vice President Environmental Strategy, as well as senior management of the company. Performance of those individuals directly involved in environmental compliance and strategy is reviewed and affects compensation as part of the annual individual performance review process. The Exelon Board of Directors has delegated to its Generation Oversight Committee and the Corporate Governance Committee the authority to

		Improvements in waste water quality - direct operations Implementation of employee awareness campaign or training program Supply chain engagement Implementation of water-related community project	oversee Exelon's compliance with health, environmental and safety laws and regulations and its strategies and efforts to protect and improve the quality of the environment, including Exelon's internal climate change and sustainability policies and programs. The respective Boards of the Utility Registrants oversee environmental, health and safety issues related to these companies.
Non-monetary reward	Corporate executive team	Reduction of water withdrawals Reduction in consumption volumes Improvements in efficiency - direct operations Improvements in waste water quality - direct operations Implementation of employee awareness campaign or training program Supply chain engagement Implementation of water-related community project	The Exelon Board of Directors is responsible for overseeing the management of environmental matters. Exelon has a management team to address environmental compliance and strategy, including the CEO, the Corporate Chief Sustainability Officer, the Senior Vice President Regulatory Policy and Analysis, and the Vice President Environmental Strategy, as well as senior management of the company. Performance of those individuals directly involved in environmental compliance and strategy is reviewed and affects compensation as part of the annual individual performance review process. The Exelon Board of Directors has delegated to its Generation Oversight Committee and the Corporate Governance Committee the authority to oversee Exelon's compliance with health, environmental and safety laws and regulations and its strategies and efforts to protect and improve the quality of the environment, including Exelon's internal climate change and sustainability policies and programs. The respective Boards of the Utility Registrants oversee environmental, health and safety issues related to these companies.

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, direct engagement with policy makers
Yes, trade associations
Yes, funding research organizations
Yes, other

W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

Exelon provides a framework of core values and a company-wide Code of Business Conduct that defines objectives, expectations and responsibilities for our employees, and provides guidance and support. Furthermore, Exelon has an established enterprise-wide management model. Effective governance of our sustainability performance, including water-related commitments, starts with the Governance Committee of the Exelon Board of Directors, whose charter includes oversight for this aspect of our business. The Exelon Environmental Regulatory & Policy Group (EERPG) is a forum for Exelon's business units to share information about emerging environmental, regulatory, legislative and policy issues that are occurring at the federal, regional and state levels as well as to ensure consistency among our Company's environmental commitments. We maintain a Water Resource Management Policy, which establishes our corporate position on this issue: to manage water as an essential natural resource for sustained operations; to improve our management of water resources, preventing pollution and complying with all applicable water use laws and regulations with the objective of advancing water resource management beyond compliance to create or protect value; to understand natural and man-made impacts on water resources including climate change and continuously adapting strategies and plans to address these issues; and to engage local and other relevant stakeholders when addressing water issues.

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

Yes (you may attach the report - this is optional)

Exelon 10K 2020.pdf

pp. 20-21, 23

W7. Business strategy

W7.1

(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	11-15	We identify and assess relevant near and long-term water issues in support of strategic planning, risk management, capital expenditures and business planning, including consideration of geographic water stressed regions, with a focus on ensuring the availability of water and its effective use. We also consider different climate change related conditions. including temperature, precipitation, storm frequency and intensity trends and sea level rise projections into our business planning and risk assessment processes. We review flood risk for all critical substations and assess the implications, at a high-level, of worst-case conditions. We work with NOAA and others to improve access to industry data and understand the climate change projections that would most impact electric sector operations and equipment.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	We integrate water resource considerations into the life-cycle of operations, products and services (i.e., design, supply chain, operations, customer interfaces, maintenance and de-commissioning) to avoid, mitigate or improve water use impacts. We establish annual performance targets and long-term water management goals at an operating company level to drive performance improvement in areas including water availability, water use, water quality and protection of aquatic species and habitats. We annually track and publicly report on water availability/use and relevant issues internally and

			externally. We employ Best Management Practices (BMP) and standards to improve life-cycle water use and water quality and to reduce the risk of adverse impacts on operations and the environment. We raise the awareness of employees, suppliers and other key stakeholders of the strategic importance of water and the need for effective water use management to sustain operations, communities and the ecosystem. We also advocate on water and energy public policy issues based on sound science, competitive markets and universal safe drinking water and sanitation.
Financial planning	Yes, water-related issues are integrated	11-15	Exelon regularly completes risk assessments to identify and focus on the top risks facing our company, including water-related aspects. Our assessment framework looks at strategic, financial, operational, regulatory/compliance and reputational risks and is being automated for improved intelligence and risk analytics. Additionally, Exelon employs various market, credit, liquidity and operational risk assessment tools to identify financial and business risk exposures that are evaluated by risk management committees at the corporate level and within each business unit.

W7.2

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

Row 1

Water-related CAPEX (+/- % change)

0

Anticipated forward trend for CAPEX (+/- % change)

0

Water-related OPEX (+/- % change)

-2

Anticipated forward trend for OPEX (+/- % change)

0

Please explain

Capital and operating expenditures can vary significantly based on such factors as regulatory compliance, changing permit and access fees, and one-time project completions among other things. From 2019 to 2020, there was no change in our CAPEX expenditures. However, our OPEX expenditures fell year over year owing to several of these factors. We do not anticipate any significant water related CAPEX or OPEX changes in the short term given the current regulatory and operational environment.

W7.3

(W7.3) Does your organization use climate-related scenario analysis to inform its business strategy?

	Use of climate-related scenario analysis	Comment
Row 1	Yes	Exelon performs scenario analyses to better understand how climate change could affect the energy economy, customers and communities where we operate. All scenarios suggest a varying degree of potential impacts for society and the energy sector and present opportunities and risks for Exelon's competitive hybrid model. Incorporating climate change scenario analysis into our business strategy ensures that as we focus on the durable trends that impact our strategy today, we also consider different climate change related conditions. including temperature, precipitation, storm frequency and intensity trends and sea level rise projections into our business planning and risk assessment processes. We review flood risk for all critical substations and assess the implications, at a high-level, of worst-case conditions. We work with NOAA and others to improve access to industry data and understand the climate change projections that would most impact electric sector operations and equipment.

W7.3a

(W7.3a) Has your organization identified any water-related outcomes from your climate-related scenario analysis?

Yes

W7.3b

(W7.3b) What water-related outcomes were identified from the use of climate-related scenario analysis, and what was your organization's response?

	Climate-related scenarios and models applied	Description of possible water-related outcomes	Company response to possible water-related outcomes
Row 1	2DS DDPP	As part of our efforts to mitigate climate change risks, we are closely monitoring drought risk and changing precipitation patterns that have the potential to impact our production of electricity. Recently, Exelon targeted two locations in Texas for the construction of new plants. Both locations were challenged with respect to drought conditions and water supply. In addition, the region had projections in the National Climatic Assessment report that indicated both increasing temperature and drought conditions.	Exelon responded by choosing to construct its two new generation stations to be dry-cooled, instead of water-cooled. By designing these plants to be air-cooled, Exelon eliminated the need for long term water supply as part of their operations, which otherwise would have been drawn from local surface water systems. The new generation totals 2,189 MW of highly efficient combined cycle natural gas generation at our brownfield Wolf Hollow II and Colorado Bend II generating stations in Texas. In addition to the water saving benefits, the quick ramping nature of this generation allows it to respond rapidly to changes in demand and supply, including variable wind power production, supporting a more reliable power system as renewables increase in the regional supply. Also, in support of climate change mitigation depending on annual dispatch, these units also have the potential to lower regional grid emissions by an estimated 1 million metric tons of carbon dioxide (CO2) by displacing higher-emitting generation sources. These units came online in 2017.

W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

No, and we do not anticipate doing so within the next two years

Please explain

At the present time weighing the most significant risk factors including increased water stress and scarcity, flooding, drought, and the related potential of climate change, we are not currently using an internal price on water.

W8. Targets

W8.1

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	Water supply to support our direct operations has not been a significant challenge in the past several years. However, we continue to assess our risks, evaluate our impacts and closely monitor our watersheds on an ongoing basis. The Exelon Environment Policy commits the company to continually improving its environmental performance, preventing pollution and utilizing natural resources more efficiently. Goals around water-related risks and opportunities such as permit non-compliance events, notices of violation and spill events are established and tracked annually within our business units and at a corporate level.

W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

Target reference number

Target 1

Category of target

Water pollution reduction

Level

Company-wide

Primary motivation

Water stewardship

Description of target

Goal: Zero Notices of Violation. The Exelon Environment Policy commits the company to continually improving its environmental performance, preventing pollution and utilizing natural resources more efficiently. This is an absolute target applicable to all company operations on an annually recurring basis. There is no baseline comparison and the goal is refreshed every year.

Quantitative metric

Other, please specify

Number of NOVs

Baseline year

2020

Start year

2020

Target year

2020

% of target achieved

88

Please explain

Seven of eight business units achieved the goal of zero NOVs. This is a year-on-year rolling target and has the same baseline, start and target years as described in the description.

Target reference number

Target 2

Category of target

Water pollution reduction

Level

Company-wide

Primary motivation

Brand value protection

Description of target

Goal: Zero Permit Non-Compliances. The Exelon Environment Policy commits the company to continually improving its environmental performance, preventing pollution and utilizing natural resources more efficiently. This is an absolute target applicable to all company operations on an annually recurring basis. There is no base line comparison and the goal is refreshed every year.

Quantitative metric

Other, please specify

Number of Permit Non-Compliances

Baseline year

2020

Start year

2020

Target year

2020

% of target achieved

25

Please explain

Two of eight business units achieved the goal of zero permit non-compliances. This is a year-on-year rolling target and has the same baseline, start and target years as described in the description.

Target reference number

Target 3

Category of target

Water pollution reduction

Level

Company-wide

Primary motivation

Risk mitigation

Description of target

Goal: Zero Preventable Reportable Spills. The Exelon Environment Policy commits the company to continually improving its environmental performance, preventing pollution and utilizing natural resources more efficiently. This is an absolute target applicable to all company operations on an annually recurring basis. There is no base line comparison and the goal is refreshed every year.

Quantitative metric

Other, please specify

Number of Preventable Reportable Spills

Baseline year

2020

Start year

2020

Target year

2020

% of target achieved

100

Please explain

Four or four business units achieved the goal of zero preventable reportable spill events. This is a year-on-year rolling target and has the same baseline, start and target years as described in the description.

Target reference number

Target 4

Category of target

Water pollution reduction

Level

Company-wide

Primary motivation

Water stewardship

Description of target

Distinguished Goal: Zero Reportable Spills under the National Response Center (NRC) spill reporting criteria. The Exelon Environmental Policy commits the company to continually improving its environmental performance, preventing pollution and utilizing natural resources more

efficiently. This is an absolute target applicable to all company operations on an annually recurring basis. There is no base line comparison and the goal is refreshed every year.

Quantitative metric

Other, please specify

Number of Reportable Spills

Baseline year

2020

Start year

2020

Target year

2020

% of target achieved

38

Please explain

Three of eight business units achieved the goal of zero NRC reportable spills. This is a year-on-year rolling target and has the same baseline, start and target years as described in the instructions,

W8.1b

(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

Goal

Watershed remediation and habitat restoration, ecosystem preservation

Level

Company-wide

Motivation

Risk mitigation

Description of goal

The prevention of tritium releases and the protection and monitoring of buried piping and tanks containing hazardous substances in support of mitigation of unplanned releases of tritium. Exelon launched an extensive monitoring and mitigation program, performed risk assessments and has engaged in regular public outreach with the surrounding communities, cooperating with regulatory agencies and elected officials. We also adopted the Nuclear Energy Institute program 07-07 for the prevention of tritium releases and 09-14 for the protection and monitoring of buried piping and tanks containing hazardous substances.

Baseline year

2020

Start year

2020

End year

2020

Progress

Exelon Nuclear continues to implement a radiological groundwater protection program across the nuclear fleet to identify and mitigate unplanned releases to soils, groundwater and surface water. Progress is measured by the number of permit non-compliances, notices of violation or spill events for which targets are set as a corporation and not allocated to individual business units. The program has been successful at monitoring and mitigating releases, and our nuclear groups performance has been consistent from 2019 to 2020.

Goal

Watershed remediation and habitat restoration, ecosystem preservation

Level

Company-wide

Motivation

Water stewardship

Description of goal

Collaborate with environmental NGOs and wildlife organizations to preserve, protect and restore sensitive habitats. Exelon participates in management of watershed issues where it has operations (e.g., Susquehanna River Basin Commission, Delaware River Basin Commission). Exelon collaborates with environmental NGOs and wildlife organizations to preserve, protect and restore sensitive habitats (e.g., Wildlife Habitat Council, Ducks Unlimited, Partnership for the Delaware Estuary, Trout Unlimited and the Water Resources Association for the Delaware River Basin, Center for Inland Bays, Anacostia Watershed Society, Delaware Nature Society, The Nature Conservancy, and many others).

Baseline year

2020

Start year

2020

End year

2020

Progress

Progress is measured through ongoing representation, support and presentation at organizational meetings and forums. For 2020, we maintained our participation with external groups and plan to continue participation in 2021.

Goal

Engaging with local community

Level

Company-wide

Motivation

Water stewardship

Description of goal

Wildlife Habitat Council (WHC) and National Wildlife Federation (NWF) certificated wildlife habitat projects and programs help educate employees and the community at large, making global sustainability issues part of our everyday lives. Nuclear power plants tend to include significant buffer areas within their boundaries, making them ideal locations for habitat conservation efforts, while utility rights-of-way (ROW) have the potential for a network of habitat through community greenways managed for native vegetation, we refer to as Integrated Vegetation Management (IVM).

Baseline year

2020

Start year

2020

End year

2020

Progress

Exelon has a longstanding partnership with the Wildlife Habitat Council (WHC) to restore and enhance wildlife habitats at our facilities and on our ROWs. Exelon has been a member of the WHC for 15 years, with a total of 50 sites certified by WHC. The WHC Certification Program provides us with a guidance tool and objective oversight for creating and maintaining high-quality wildlife habitats, as well as implementing environmental education programs. Seventy of our facilities or ROWs have National Wildlife Federation (NWF) habitat certifications, and one facility has an Audubon Bird-Friendly habitat certification. The PHI Pepco WaterShed Sustainability Center in Rockville, MD which has a WHC certification, is open to the public, including students and educators, providing community education and outreach by combining hands-on learning with interactive displays that educate visitors and help them apply the lessons of WaterShed in their own homes. The Center is also a working laboratory for collaboration between Pepco and the University of Maryland, focused on advances in energy efficiency and sustainable living. Progress is measured through the maintenance of existing certifications and the successful certification of new sites each year. We added 5 new WHC certifications and 18 new NWF registrations in 2020.

Goal

Watershed remediation and habitat restoration, ecosystem preservation

Level

Business

Motivation

Other, please specify

Ecological Sustainability

Description of goal

Support threatened and endangered species such as the restoration of American Eels in the Susquehanna River. Under both the Muddy Run Pumped Storage FERC License and the Conowingo FERC License, Exelon collects elvers at the Conowingo Dam and transports them to locations upstream above the York Haven Dam.

Baseline year

2015

Start year

2015

End year

2071

Progress

We continue our coordination of the Eel Passage Advisory Group in support of the commitments established in the Eel Management Plan of the Pennsylvania 401 Water Quality Certification (WQC) finalized in December 2014 for the Muddy Run Pumped Storage Project FERC license. As required by the Pennsylvania WQC, Exelon installed a permanent eel trap consisting of one collection tank, three holding tanks and one ramp at Conowingo, beginning operation on May 1, 2017. Exelon also operates a permanent eel trapping facility in the Octoraro Creek watershed that commenced operations in 2015. Prior to Exelon's eel facility operations, the Unites States Fish and Wildlife Service (USFWS) operated an eel

collection facility at Conowingo Dam from 2005 to 2016. In 2020, there was a delayed start to operations due to COVID-19 workplace restrictions, but the season was extended to the beginning of October to compensate for the delay. At Octoraro Creek, 3,597 eels were collected and transported to holding tanks at Conowingo. The Conowingo site collected 254,651 eels. Collectively from both sites, 255,889 were transported and released at upstream stocking sites. From 2005 through 2020, a total of 1,456,525 eels were collected and transported to tributaries in the Susquehanna River watershed above York Haven Dam.

Goal

Watershed remediation and habitat restoration, ecosystem preservation

Level

Business

Motivation

Water stewardship

Description of goal

Support water quality and habitat restoration efforts in watersheds where we have operations. Provide support and funding within the Susquehanna River watershed to reduce sediment pollution, improve mussel populations, submerged aquatic vegetation and shoreline habitat.

Baseline year

2016

Start year

2016

End year

2071

Progress

Under the Muddy Run Pumped Storage Project FERC License issued in December of 2015, Exelon provides $500,000 funding annually through 2030 for habitat improvement projects for the implementation of agricultural pasture and barnyard best management practices to

address sediment introduction and other habitat improvement projects including small dam removals. Funding is provided to Lancaster County Conservation District, York County Conservation District, and Pennsylvania Fish and Boat Commission. Exelon receives annual reports from Lancaster County Conservation District, York County Conservation District, and Pennsylvania Fish and Boat Commission listing the projects the funding has aided. This funding has provided support for riparian buffers, stream restoration, erosion control, and small dam removal.
Exelon also provides funding to MDE as part of the Offer of Settlement filed in October 2019 with FERC and the recently issued FERC license issued to Conowingo on March 19, 2021. This funding provides support for mussel restoration, resiliency projects such as SAV restoration, aquaculture, clam and oyster restoration, and living shoreline creation, and other water quality projects and will continue through 2071.

Goal

Engaging with local community

Level

Company-wide

Motivation

Brand value protection

Description of goal

Engage stakeholders in our efforts to support threatened or endangered species and provide access to experience natural resources. The smaller fish lift on the west side of the Conowingo dam continues to support U.S. Fish and Wildlife Services (USFWS) spawning and stocking activities related to protecting American shad, as well as providing support to the USFWS for studies of the American eel. In an effort of engage stakeholders in the value of natural resources, Exelon Generation opens lands for public use.

Baseline year

2020

Start year

2020

End year

2020

Progress

Exelon Generation continues to provide public access to its property for a number of recreational opportunities, including fishing, boating, camping, hiking/backpacking, bird watching, swimming and nature photography. The Muddy Run pumped storage facility also maintains a visitors center and community park land on the over 700 acres of woods and fields. Progress is monitored through the implementation of the requirements of the Conowingo DOI fish passage agreement, passage of fish upstream in the Susquehanna River watershed and number of visitors to the various recreation sites.

Goal

Watershed remediation and habitat restoration, ecosystem preservation

Level

Business

Motivation

Brand value protection

Description of goal

Exelon funds a major aquaculture facility at the Quad Cities Nuclear Station in Illinois, in cooperation with Illinois DNR, Iowa DNR and U.S. Fish and Wildlife Service, to enhance stocks of several aquatic species in the area.

Baseline year

2020

Start year

2020

End year

2020

Progress

The Quad Cities Fish Hatchery celebrated its 37th year of operation in 2020. The facility collected walleye eggs for the Illinois and Iowa Departments of Natural Resources (DNRs), as well as the U.S. Fish and Wildlife Service (USFWS), harvesting 15 million eggs for all three entities combined. The hatchery produced 31,486 advanced fingerling walleye and stocked over 2 million fry into the Mississippi and Rock Rivers. Over 44,000 advanced fingerling hybrid striped bass were produced for the Mississippi River, Clinton, Braidwood and LaSalle Lakes as requested by the IL DNR. The hatchery partnered with multiple government agencies over the last decade to grow freshwater mussels on site using local mussel beds for brood stock. The site produced nearly 5000 young-of-year Black Sandshell (Illinois State threatened), Yellow Sandshell (Iowa State threatened), and Higgins Eye (Federally Endangered), which will be held for an additional season to increase their survival rates when stocked in the fall of 2021. The hatchery did stock 1,680 two-year-old fat mucket in the Iowa River and donated 245 two-year-old Plain Pocketbook to the Urban Stream Research Center in Warrenville, Illinois.

Goal

Engaging with local community

Level

Business

Motivation

Corporate social responsibility

Description of goal

The Quad Cities aquaculture program is a valuable community and regional resource, offering many tours each year for school groups, local neighbors, fishing clubs and other resource-oriented groups with an interest in Mississippi River fisheries.

Baseline year

2020

Start year

2020

End year

2020

Progress

Progress is monitored through our Corporate Contributions group to assess the number of community engagement events including STEM activities at our Quad Cities facility. Over 200 students and adults either directly toured the fish hatchery prior to Covid-19 shutdown in March or received offsite presentations about the programs in 2020. The hatchery also regularly assists fishing tournaments to transfer, transport and conduct releases of the fish after they were caught for the major events. This approach maximizes the welfare of the fish caught during the tournaments and minimizes impacts on local fisheries.

Goal

Engagement with public policy makers to advance sustainable water management and policies

Level

Business

Motivation

Other, please specify

Ecological Sustainability

Description of goal

Support fish and eel passage, management of species of concern, and recreation and shoreline management associated with the FERC license requirements for Muddy Run and Conowingo Dam. Support habitat improvement and stream restoration projects within the watershed that promote the reduction of sediment and nutrient loads associated with sediment transport.

Baseline year

2020

Start year

2020

End year

2020

Progress

Pursuant to the Pennsylvania Department of Environmental Protection 401 Water Quality Certificate for the Muddy Run Pumped Storage Project, Exelon provides annual funding to the Lancaster County Conservation District, York County Conservation District and Pennsylvania Fish and Boat Commission for the implementation of agricultural pasture and barnyard best management practices to address sediment introduction and provide for other habitat improvement projects such as stream restoration. Projects supported in 2020 included the installation of 46 stream habitat improvement structures, 10,439 feet of streambank protection and planting over one half of an acre of riparian forest in York County, Pennsylvania.

Goal

Engagement with suppliers to help them improve water stewardship

Level

Company-wide

Motivation

Water stewardship

Description of goal

Exelon Supply Management incorporates environmental performance requirements and participation in voluntary pollution reduction programs into the supply procurement process, including measures to address supplier water use.

Baseline year

2020

Start year

2020

End year

2020

Progress

Exelon Supply Chain continued the use of the Electric Utility Industry Sustainable Supply Chain Alliance voluntary procurement standards in alignment with Exelon Water Resources Management Policy.

Goal

Promotion of water data transparency

Level

Company-wide

Motivation

Corporate social responsibility

Description of goal

Compile and publish timely and relevant data on water issues including quantity, quality and related ecological issues. Exelon is committed to the Ceres Principles and annually Ceres facilitates a corporate level review of Exelon's material sustainability issues and performance with a group of interested stakeholders. Water resource issues and the company's response are addressed as part of the review.

Baseline year

2020

Start year

2020

End year

2020

Progress

Exelon published an annual sustainability performance report, including relevant water-related data and conducted a stakeholder review of Exelon's material sustainability issues with a body of stakeholders identified and assembled by the NGO CERES.

Goal

Other, please specify

Sustainable Water Supplies

Level

Company-wide

Motivation

Other, please specify

Sustainable Revenue

Description of goal

Sustainable water supplies that are reliable, affordable and adequate. Water impacts are diverse, lending themselves to measurement techniques more complex than consumptive or non-consumptive use (gallons/MWh). The disparity in the volume of cooling water compared to other uses presents a challenge to combining water use metrics across the energy value chain. Our goals are based on key issues and greatest opportunities for value, while addressing environmental impacts.

Baseline year

2020

Start year

2020

End year

2020

Progress

Exelon completed a hydrology/climate modelling study for our Braidwood facility in 2014. Since then, Exelon continues to pursue cutting-edge research with pre-eminent researchers (such as the MIT Global Change Forum) to better understand potential climate and water impacts and to help push the current limits of the state of art modelling in the most efficient and effective manner by accessing both public and private institutions. Exelon also completed five-year Hydrologic Investigation Reports as required by NEI 07-07 (an industry groundwater protection initiative) at our Braidwood and Dresden facilities in 2020. Similar studies are in progress at our Ginna and Nine Mile Point facilities and will be completed by the end of 2021, and similar studies were completed at our Byron and Limerick facilities in 2019 and at our Peach Bottom, Quad Cities and Calvert Cliffs facilities in 2017.

Goal

Watershed remediation and habitat restoration, ecosystem preservation

Level

Company-wide

Motivation

Corporate social responsibility

Description of goal

Contributions to support environmental stewardship efforts.

Baseline year

2020

Start year

2020

End year

2020

Progress

In 2020, Exelon provided $3.9 million in financial support of environmental projects including a grant PECO provided to the Wissahickon Trails in partnership of the Wissahickon Headwaters Stream and Riparian Restoration Project. This is part of PECO's investment of $6.5 million in grants to local non-profits and community organizations. This project will offer significant benefits to the Wissahickon Watershed by improving the water quality and water flow conditions during wet weather. This collaboration, led by Wissahickon Trails and supported by Merck, PECO, Upper Gwynedd Township, and matched by additional dollars from the William Penn Foundation, PA Department of Environmental Protection, and the National Fish and Wildlife Foundation, is a shining example of what we can achieve with strong public/private partnerships. The Wissahickon Creek has been designated as an Impaired Waterway by the PA Department of Environmental Protection with sediment and nutrients identified as the primary pollutants. The Headwaters Stream and Riparian Restoration Project connected 1,775 linear feet of stream with its floodplain, allowing water to spread, slow, and settle during storms. This project will reduce sediment loads in the stream by slowing the flow, reducing erosion, and creating an opportunity for sediment to settle.

Goal

Watershed remediation and habitat restoration, ecosystem preservation

Level

Business

Motivation

Risk mitigation

Description of goal

Seasonal variations of temperature and river flow rate could potentially limit water intake needed by the Limerick plant. To address these limitations, Exelon collaborated with numerous regulatory agencies and environmental stakeholders to develop a flow augmentation alternative.

Baseline year

2020

Start year

2020

End year

2020

Progress

The flow augmentation alternative at our Limerick facility continues to use mine water to supplement flow in the Schuylkill River, pursuant to beneficial re-use standards established by the Pennsylvania Department of Environmental Protection (PA DEP). This allows the plant to continue to use the Schuylkill rather than the Delaware River as its primary source. This project has demonstrated that mine water can be a viable option for non-contact cooling water requirements.

Goal

Improve wastewater quality beyond compliance requirements

Level

Business

Motivation

Risk mitigation

Description of goal

Removal of water from subsurface manholes for completing electrical work is an ongoing issue for Exelon’s utilities. Typically, manhole water is discharged to storm sewers after being field-filtered for contaminants. At PECO, small volumes of water are transported via tanker truck to a central wastewater treatment plant where the multi-stage filtration is completed prior to discharge to the Philadelphia Water Department system.

Continue operation of a recently completed capital improvement project to rebuild a 40-yr old stormwater treatment system at ComEd's Maywood Technical Center in Maywood, IL.

Baseline year

2020

Start year

2020

End year

2020

Progress

The PECO central maintenance facility's wastewater treatment plant treats manhole water under a permit from the Philadelphia Water Department. To supplement the central wastewater treatment plan, PECO constructed a mobile wastewater treatment plant that has been used to field-filter manhole water to reduce the amount of truck traffic transporting water to the centralized water treatment plant. This plant will continue to operate on an ongoing basis.

ComEd's two (2) treatment plants at the Maywood Technical Center treating 32-acres of stormwater were completely rebuilt utilizing an engineering design that focused primarily on improving permit-required water quality of stormwater discharges. Solids removal were optimized by the installation of additional baffling, redesigning discharge weirs, high-efficiency submersible pumps and new "wet well" design. The Scada system allows for remote operational interface and "real time" monitoring of system influent (pumps) and effluent flow rates, and the systems continue to operate efficiently. The high efficiency Oil Water Separators (OWS) have been completely cleaned, operations restored and the contents (oily sediments) removed and properly disposed of in 2019-2020. This Preventative Maintenance (PM) cleaning increases each unit's efficiency and helps these to exceed compliance discharge standards established in the NPDES permit.

Goal

Reduce environmental impact of product in use phase

Level

Business

Motivation

Reduced environmental impact

Description of goal

Exelon Generation will continue operation of two recently constructed combined-cycle gas turbine (CCGT) units in Texas utilizing a new General Electric technology that makes them among the cleanest, most efficient CCGTs in the state and the nation.

Baseline year

2020

Start year

2020

End year

2020

Progress

Each new unit adds approximately 1,000 MW of capacity to their respective sites; being mindful of increased water efficiency in drought-prone Texas, the new units are cooled with air instead of water. These units became commercially available in 2017. Water use associated with the dry-cooled technology use is significantly less than traditional water-cooled turbines.

Goal

Engaging with local community

Level

Company-wide

Motivation

Brand value protection

Description of goal

Support STEM education and activities in the communities in which we operate such as the Delaware Valley Science Fair (DVSF). By doing a research project, students develop critical problem-solving skills that they will need for careers, college, and citizenship. Schools located in NJ, DE and PA.

Baseline year

2020

Start year

2020

End year

2020

Progress

In April 2021, Exelon had 88 employees volunteer as judges at the regional DVSF virtual competition. Each year, 900 to 1,000 students in grades 6th through 12th from Pennsylvania, Southern New Jersey, and Delaware make new discoveries that could change their lives forever as they participate in the DVSF. Due to Covid-19, the 2021 DVSF was conducted virtually. From the 2021 DVSF, 16 students went on to compete at the Intel International Science and Engineering Fair (ISEF).

Goal

Watershed remediation and habitat restoration, ecosystem preservation

Level

Business

Motivation

Water stewardship

Description of goal

Conowingo Dam has an ongoing debris management plan to remove material coming from upstream sources. On average, Conowingo removes 600 tons of upstream debris per year from Conowingo Pond.

Baseline year

2020

Start year

2020

End year

2020

Progress

Cranes on top of the dam scoop up debris from upstream sources floating on the surface of the pond, all of which has been segregated and recycled. Conowingo Dam recently purchased a skimmer boat especially designed that will help with on-going debris management. On March 19, 2021, the Federal Energy Regulatory Commission (FERC) issued a new 50-year license for the Conowingo hydroelectric facility, effective March 1, 2021. The new license incorporates conditions agreed upon by Exelon and the state of Maryland under which Exelon will invest $200 million in environmental measures to benefit the Susquehanna River, and, by extension, the Chesapeake Bay. This includes $41 million to reduce the amount of trash and debris passing through the dam toward the bay.

Goal

Improve wastewater quality beyond compliance requirements

Level

Company-wide

Motivation

Water stewardship

Description of goal

Maintain ISO 14001:2015 certified Environmental Management System

Baseline year

2020

Start year

2020

End year

2020

Progress

Exelon maintains an ISO 14001 certified Environmental Management System. In accordance with this standard, annual objectives and targets related to managing risks are established to address environmental risks. Operating companies and business units are responsible for establishing their own risk policies that satisfy the guiding principles of the Exelon Risk Policy (RK-AC-01). Progress is measured through the maintenance of our ISO compliant management system.

W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

Yes

W9.1a

(W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W1 Current state	Applicable withdrawals and discharges are monitored for both quantity and quality. This includes cooling water intakes and discharges, treated wastewater discharges, storm water and various industrial or construction related activities.	Other, please specify USEPA NPDES System, US DOE EIA Reporting Requirements (Fm. 923)	The CWA's National Pollutant Discharge Elimination System (NPDES) Program regulates point sources that discharge pollutants into waters of the United States. Compliance monitoring under the NPDES Program encompasses a range of techniques, from Discharge Monitoring Report reviews, to on-site compliance evaluation as well as providing assistance to enhance compliance with NPDES permits. The objective is to address the most significant problems and to promote compliance among the regulated community. The NPDES Compliance Inspection Manual

			provides information on how compliance inspections are conducted. Form EIA-923 collects information on the operation of electric power plants and combined heat and power (CHP) plants in the United States. Data collected on this form includes electric power generation operational cooling water data. These data are used to monitor the status and trends of the electric power industry and appear in U.S. Energy Information Administration (EIA) publications and public databases.

W10. Sign off

W-FI

(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

W10.1

(W10.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Vice President, Corporate Strategy; Chief Sustainability Officer	Chief Sustainability Officer (CSO)

W10.2

(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

Yes

SW. Supply chain module

SW0.1

(SW0.1) What is your organization's annual revenue for the reporting period?

	Annual revenue
Row 1	33,039,000,000

SW0.2

(SW0.2) Do you have an ISIN for your organization that you are willing to share with CDP?

Yes

SW0.2a

(SW0.2a) Please share your ISIN in the table below.

	ISIN country code	ISIN numeric identifier (including single check digit)
Row 1	US	30161N1019

SW1.1

(SW1.1) Could any of your facilities reported in W5.1 have an impact on a requesting CDP supply chain member?

This is confidential

SW1.2

(SW1.2) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?	Comment
Row 1	Yes, for some facilities	We have provided geolocation data for those facilities reported in Section 5.1 We also provide an analysis of our operations in relation to water scarcity as depicted by the WRI Water Risk Atlas as provided in our annual Corporate Sustainability Report (CSR).

SW1.2a

(SW1.2a) Please provide all available geolocation data for your facilities.

Identifier	Latitude	Longitude	Comment
Numerous Facilities			We have provided geolocation data for those facilities reported in Section 5.1. We also provide an analysis of our operations in relation to water scarcity as depicted by the WRI Water Risk Atlas as provided in our annual CSR.

SW2.1

(SW2.1) Please propose any mutually beneficial water-related projects you could collaborate on with specific CDP supply chain members.

SW2.2

(SW2.2) Have any water projects been implemented due to CDP supply chain member engagement?

No

SW3.1

(SW3.1) Provide any available water intensity values for your organization's products or services.

Product name

Thermoelectric Power Generation

Water intensity value

1.14

Numerator: Water aspect

Water consumed

Denominator

MWh

Comment

While our facilities draw upon water resources for their operation, greater than 98% of water withdrawn from fresh, brackish or sea water is returned to the source. Comparing the intensity for total water consumption provides a means for us to fully evaluate the impact of our business on shared water resources. We utilize this metric to evaluate opportunities for changes in business practices such as reuse or reduction techniques to further strengthen our role as an environmental steward. We do not anticipate significant changes to this value in 2021.

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response		Public

Please confirm below

I have read and accept the applicable Terms