Module: Introduction

Page: W0. Introduction

W0.1

Introduction

Please give a general description and introduction to your organization

Xcel Energy is a U.S. investor-owned electricity and natural gas company with regulated operations in eight Midwestern and Western states. Based in Minneapolis, Minn., we provide a comprehensive portfolio of energy-related products and services to approximately 3.5 million electricity customers and 2.0 million natural gas customers through four wholly owned utility subsidiaries. According to the American Wind Energy Association, Xcel Energy is the number one wind energy provider among U.S. utilities, an honor the company has held for over a decade.

We routinely provide a wealth of company-related information to the public and lead the industry in environmental disclosures. Our Corporate Responsibility Report, filings with the Securities and Exchange Commission (SEC), responses to the CDP questionnaires, and reporting through The Climate Registry provide detailed information regarding a variety of environmental issues, including climate change and water. We disclose metrics related to our water use and management in our annual Corporate Responsibility Report. This report has been prepared using reasonably available data, information, emission factors, and protocols and is subject to uncertainties and variability associated with each item.

SAFE HARBOR STATEMENT
This material contains forward-looking statements that are subject to certain risks, uncertainties and assumptions. Such forward looking statements include projected earnings, cash flows, capital expenditures and other statements including projected earnings, cash flows, capital expenditures and other statements and are identified in this document by the words “anticipate”, “estimate”, “expect”, “projected”, “objective”, “outlook”, “possible”, “potential” and similar expressions. Actual results may vary materially. Factors that could cause actual results to differ materially include, but are not limited to: general economic conditions, including the availability of credit, actions of rating agencies and their impact on capital expenditures; business conditions in the energy industry: competitive factors; unusual weather; effects of geopolitical events; including war and acts of terrorism; changes in federal or state legislation; regulation; actions of regulatory bodies; and other risk factors listed from time to time by Xcel Energy in reports filed with the SEC.

W0.2

Reporting year

Please state the start and end date of the year for which you are reporting data

Period for which data is reported
Fri 01 Jan 2016 - Sat 31 Dec 2016

W0.3

Reporting boundary

Please indicate the category that describes the reporting boundary for companies, entities, or groups for which water-related impacts are reported

Companies, entities or groups over which financial control is exercised

W0.4

Exclusions

Are there any geographies, facilities or types of water inputs/outputs within this boundary which are not included in your disclosure?

No

W0.4a

Exclusions

Please report the exclusions in the following table

Exclusion	Please explain why you have made the exclusion

Further Information

Module: Current State

Page: W1. Context

W1.1

Please rate the importance (current and future) of water quality and water quantity to the success of your organization

Water quality and quantity	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Important	Not important at all	Adequate water supply is critical for cooling electric generation and as fuel for hydroelectric generation. Xcel Energy has a diverse water supply portfolio to mitigate risk.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Not important at all	Several facilities use recycled water directly from municipal wastewater treatment plants.

W1.2

For your total operations, please detail which of the following water aspects are regularly measured and monitored and provide an explanation as to why or why not

Water aspect	% of sites/facilities/operations	Please explain
Water withdrawals- total volumes	76-100	All water withdrawals are measured daily
Water withdrawals- volume by sources	76-100	All water withdrawals are measured, by source
Water discharges- total volumes	76-100	Water discharges are measured daily
Water discharges- volume by destination	76-100	Water discharges are measured daily totals by destination.
Water discharges- volume by treatment method	76-100	Discharges are measured daily by treatment method.
Water discharge quality data- quality by standard effluent parameters	76-100	Discharge quality data are measured in accordance with relevant discharge permits.
Water consumption- total volume	76-100	Daily water consumption data are tracked for all major facilities.
Facilities providing fully-functioning WASH services for all workers	76-100	Water, sanitation, and hygiene services are provided at all facilities.

W1.2a

Water withdrawals: for the reporting year, please provide total water withdrawal data by source, across your operations

Source	Quantity (megaliters/year)	How does total water withdrawals for this source compare to the last reporting year?	Comment
Fresh surface water	2401016	About the same	About the same, no significant change
Brackish surface water/seawater	0	Not applicable	Not used
Rainwater	0	Not applicable	Not used
Groundwater - renewable	0	Not applicable	Not used
Groundwater - non-renewable	16014	Lower	Changes in groundwater water use are due to annual variability in generation
Produced/process water	0	Not applicable	Not used

Source	Quantity (megaliters/year)	How does total water withdrawals for this source compare to the last reporting year?	Comment
Municipal supply	1095	About the same	The same
Wastewater from another organization	20897	Higher	Changes in wastewater use are due to annual variability in generation
Total	2439022	About the same	The same

W1.2b

Water discharges: for the reporting year, please provide total water discharge data by destination, across your operations

Destination	Quantity (megaliters/year)	How does total water discharged to this destination compare to the last reporting year?	Comment
Fresh surface water	2342146	About the same	The same
Brackish surface water/seawater	0	Not applicable	Not Used
Groundwater	0	Not applicable	Not Used
Municipal/industrial wastewater treatment plant	0	Not applicable	Not Used
Wastewater for another organization	5505	Higher	Changes in discharge for wastewater use by another organization are due to annual variability in generation
Total	2347651	About the same	The same

W1.2c

Water consumption: for the reporting year, please provide total water consumption data, across your operations

Consumption (megaliters/year)	How does this consumption figure compare to the last reporting year?	Comment
91371	Lower	Changes in water consumption are due to annual variability in generation

W1.3

Do you request your suppliers to report on their water use, risks and/or management?

W1.3a

Please provide the proportion of suppliers you request to report on their water use, risks and/or management and the proportion of your procurement spend this represents

Proportion of suppliers %	Total procurement spend %	Rationale for this coverage

W1.3b

Please choose the option that best explains why you do not request your suppliers to report on their water use, risks and/or management

Primary reason	Please explain

W1.4

Has your organization experienced any detrimental impacts related to water in the reporting year?

No

W1.4a

Please describe the detrimental impacts experienced by your organization related to water in the reporting year

Country	River basin	Impact driver	Impact	Description of impact	Length of impact	Overall financial impact	Response strategy	Description of response strategy

W1.4b

Please choose the option below that best explains why you do not know if your organization experienced any detrimental impacts related to water in the reporting year and any plans you have to investigate this in the future

Primary reason	Future plans

Further Information

Module: Risk Assessment

Page: W2. Procedures and Requirements

W2.1

Does your organization undertake a water-related risk assessment?

Water risks are assessed

W2.2

Please select the options that best describe your procedures with regard to assessing water risks

Risk assessment procedure	Coverage	Scale	Please explain
Water risk assessment undertaken independently of other risk assessments	Direct operations and supply chain	All facilities and some suppliers	Xcel Energy employs Water Resources and Risk Management staff to track water-related and other risk to its business. The Water Resources department specifically tracks water usage at facilities and employs sophisticated scenario modelling tools to predict future risk. Further, we engage with principal water suppliers to understand and monitor their water-related risk.

W2.3

Please state how frequently you undertake water risk assessments, at what geographical scale and how far into the future you consider risks for each assessment

Frequency	Geographic scale	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Facility	>6 years	Xcel Energy employs Water Resources staff which is specifically charged to monitor water-related risk on a continual basis, including forecasting water supply on a near-term, mid-term, and long-term basis.

W2.4

Have you evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy?

Yes, evaluated over the next 1 year

W2.4a

Please explain how your organization evaluated the effects of water risks on the success (viability, constraints) of your organization's growth strategy?

Xcel Energy bases water risk forecasting on the firm yield of its water supplies, consistent with the methodology employed by most water utilities. It then evaluates water risk for existing facilities and future facilities based on the available firm yield of its supplies versus the projected demand for those facilities. Xcel Energy's growth strategy is centered on the addition of renewable generation resources, which are less dependent on water for generation than its fossil generation fleet.

Example: the company maintains a sophisticated water supply/water demand projection tool for a river basin containing multiple generating stations which utilize an integrated water supply. The tool uses output from the company's generation forecasting tools to forecast water demand by plant. Water demand projections are then offset by the firm or known yields of company water supplies to both identify deficits and to create a preliminary water operations schedule for the interconnected plants.

Example: the company is moving into quantitative risk forecasting based on historic hydrology and on scenario modeling, using a sophisticated modeling platform which incorporates physical, hydrologic and institutional constraints, such as the relative priority of water rights in the basin. The initial results are in and are being used to define water risk at individual generating stations, as well as to refine future water supply forecasts, such as in the example provided above.

W2.4b

What is the main reason for not having evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy, and are there any plans in place to do so in the future?

Main reason	Current plans	Timeframe until evaluation	Comment

W2.5

Please state the methods used to assess water risks

Method	Please explain how these methods are used in your risk assessment
Internal company knowledge Life Cycle Assessment Regional government databases Other: Internally-developed models	Xcel Energy's Water Resources department uses sophisticated modeling and forecasting tools developed for local river basins which it operates in. These models incorporate physical and hydrological characteristics and data, in addition to institutional data, such as the relative priority of water rights in the basin (both the company and other water users). These tools are continually updated as physical and institutional changes occur. These tools are used to forecast both near-term water supplies as well as water risk over the life-cycle of the generating station. Data examples: - Streamflow and water use data from both state and federal sources - Snowpack data from federal sources - Hydrologic-institutional predictive models (based on state sources to maintain a common platform for comparative analyses) - GIS data (company-generated, or from local, state and federal sources) - weather forecasting data from private, state, and federal sources, including both near-term and mid-term forecasts. Example: The data above are input directly or indirectly into internally-developed spreadsheet models (such as that described in W2.4a) to improve near-term and long-term water supply forecasts. Water supply data is used in hydrologic-institutional models to predict generation risk over asset life-cycle to quantify risk to generation.

W2.6

Which of the following contextual issues are always factored into your organization's water risk assessments?

Issues	Choose option	Please explain
Current water availability and quality parameters at a local level	Relevant, included	Critical component of water availability forecasts and scenario modeling
Current water regulatory frameworks and tariffs at a local level	Relevant, included	Critical component of water availability forecasts and scenario modeling
Current stakeholder conflicts concerning water resources at a local level	Relevant, included	Critical component of water availability forecasts and scenario modeling
Current implications of water on your key commodities/raw materials	Relevant, included	Critical component of water availability forecasts and scenario modeling. Limited to water suppliers only.
Current status of ecosystems and habitats at a local level	Relevant, included	Critical component of water availability forecasts and scenario modeling
Current river basin management plans	Relevant, included	Critical component of water availability forecasts and scenario modeling
Current access to fully-functioning WASH services for all employees	Relevant, included	Critical component of water availability forecasts and scenario modeling. WASH services are routinely provided at all facilities
Estimates of future changes in water availability at a local level	Relevant, included	Critical component of water availability forecasts and scenario modeling. Future changes include estimates of water use changes by company assets, other water users, and future climatic conditions.
Estimates of future potential regulatory changes at a local level	Relevant, included	Critical component of water availability forecasts and scenario modeling. Company personnel are engaged with regulators at the federal, state, and local levels to track and understand these potential changes.
Estimates of future potential stakeholder conflicts at a local level	Relevant, included	Company personnel are engaged with stakeholders through a variety of forums which are in-place in our operating regions.
Estimates of future implications of water on your key commodities/raw materials	Relevant, included	Company personnel are engaged with critical water suppliers through a variety of forms which are in-place in our operating regions.
Estimates of future potential changes in the status of ecosystems and habitats at a local	Relevant, included	Company personnel are engaged with endangered species recovery programs directly and through a variety of forums which are in-place in our operating regions. Forecasting models

Issues	Choose option	Please explain
level		consider a variety of future changes in recovery program requirements.
Scenario analysis of availability of sufficient quantity and quality of water relevant for your operations at a local level	Relevant, included	The company has developed sophisticated hydrologic and institutional modeling that allows scenarios to be evaluated and quantitative risk assessments to be undertaken. Common scenarios include historic hydrology, paleohydrology, and estimates of future climate change impacts.
Scenario analysis of regulatory and/or tariff changes at a local level	Relevant, included	Company scenario modeling tools incorporate regulatory change scenarios.
Scenario analysis of stakeholder conflicts concerning water resources at a local level	Relevant, not yet included	Company scenario modeling tools include the capability to analyze future stakeholder conflicts as they are identified.
Scenario analysis of implications of water on your key commodities/raw materials	Relevant, not yet included	Company scenario modeling includes key water suppliers, but does not yet include scenario modeling of the water suppliers supply chain.
Scenario analysis of potential changes in the status of ecosystems and habitats at a local level	Relevant, included	Company scenario modeling includes evaluation of changes to species recovery programs that may occur in the future.
Other		

W2.7

Which of the following stakeholders are always factored into your organization's water risk assessments?

Stakeholder	Choose option	Please explain
Customers	Relevant, included	Forecasts, risk assessments, and contingency plans are developed to ensure continual delivery of electricity to customers.
Employees	Relevant, included	Forecasts, risk assessments, and contingency plans are developed to ensure continual delivery of water and electricity to employees at work sites. Further, operational planning and engagement activities keep employees actively involved in operations and risk mitigation activities.
Investors	Relevant,	Forecasts, risk assessments, and contingency plans are developed to ensure continual delivery of electricity to

Stakeholder	Choose option	Please explain
	included	customers, which supports company profitability. Further, cost control is a significant factor in forecasts, risk assessments, and contingency planning.
Local communities	Relevant, included	Local communities are also our customers and are at the forefront of risk assessment and contingency planning.
NGOs	Relevant, included	NGOs are considered through a variety of partnership opportunities that the company is pursuing. The company stays abreast of NGO interests through a variety of local forum and through direct engagement.
Other water users at a local level	Relevant, included	Other water user needs are tracked through a variety of local forums. company forecasts and scenario modeling include other water user needs in the forecast results.
Regulators	Relevant, included	The company engages with local, state and federal regulators in a number of ways on a regular basis. Current and anticipated future regulatory constraints are incorporated into company forecasts and risk assessments.
River basin management authorities	Relevant, included	The company engages with local, state and federal regulators in a number of ways on a regular basis. Current and anticipated future regulatory constraints are incorporated into company forecasts and risk assessments.
Statutory special interest groups at a local level	Relevant, included	The company engages with local, state and federal interest groups in a number of ways on a regular basis.
Suppliers	Relevant, included	The company engages with critical water suppliers on a regular and consistent basis, and incorporates critical information/constraints into forecasts and risk assessments.
Water utilities at a local level	Relevant, included	See above (suppliers). Additionally, the company engages with other water utilities that may not be water suppliers in order to resolve conflict or realize mutually-beneficial opportunities.
Other		

W2.8

Please choose the option that best explains why your organisation does not undertake a water-related risk assessment

Primary reason	Please explain

Further Information

Module: Implications

Page: W3. Water Risks

W3.1

Is your organization exposed to water risks, either current and/or future, that could generate a substantive change in your business, operations, revenue or expenditure?

Yes, direct operations and supply chain

W3.2

Please provide details as to how your organization defines substantive change in your business, operations, revenue or expenditure from water risk

We assess water risk according to the potential impact on any of our major generating facilities. To the extent that water risks may inhibit the ability of any of our major units to deliver reliable electricity to the market and meet market demand, that risk is considered to have a potential to create substantive change. We assess water risk including drought, flooding, availability, and quality risks that could impact our ability to operate reliably.

W3.2a

Please provide the number of facilities* per river basin exposed to water risks that could generate a substantive change in your business, operations, revenue or expenditure; and the proportion of company-widefacilities this represents

Country	River basin	Number of facilities exposed to water risk	Proportion of company-wide facilities that this represents (%)	Comment

Country	River basin	Number of facilities exposed to water risk	Proportion of company-wide facilities that this represents (%)	Comment
United States of America	Mississippi River	18	21-30	We have several hydro facilities located in this basin that were not included in question 5.1. Also, gas facilities that do not use water, and facilities that are decommissioned were also not included.
United States of America	Colorado River (Pacific Ocean)	1	1-5	We also have three hydro facilities in this basin, but they are not included in the 5.1 reporting question.
United States of America	Brazos River	3	1-5	
United States of America	Colorado River (Caribbean Sea)	2	1-5	
United States of America	St. Lawrence	1	1-5	There are also 3 hydro facilities in this basin that were not included in question 5.1

W3.2b

For each river basin mentioned in W3.2a, please provide the proportion of the company's total financial value that could be affected by water risks

Country	River basin	Financial reporting metric	Proportion of chosen metric that could be affected	Comment
United States of America	Mississippi River			
United States of America	Colorado River (Pacific Ocean)			
United States of America	Brazos River			
United States of America	Colorado River (Caribbean Sea)			
United States of America	St. Lawrence			

W3.2c

Please list the inherent water risks that could generate a substantive change in your business, operations, revenue or expenditure, the potential impact to your direct operations and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
United States of America	Mississippi River	Physical-Drought Physical-Flooding	Higher operating costs	Widespread and/or severe drought may cause the company to exercise water contingency plans, which are higher cost than typical water supplies. Flooding may cause damage to company infrastructure located in the flooded watercourse.	Unknown	Unknown	Low	Engagement with other stakeholders in the river basin Engagement with suppliers Infrastructure investment Infrastructure maintenance		
United States of America	Colorado River (Pacific Ocean)	Physical-Drought Physical-Flooding	Plant/production disruption leading to reduced output	Drought reducing water supply to hydropower generation. Flooding may cause damage to company infrastructure located in the flooded watercourse.	Unknown	Unknown	Low	Develop flood emergency plans Engagement with community Engagement with other stakeholders in the river basin		
United States of America	Brazos River	Physical-Projected water scarcity	Plant/production disruption leading to reduced output	Declining Ogallala Aquifer water supply is increasing regional projected water stress	>6 years	Probable	Low-medium	Engagement with community Engagement		

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
		Physical-Projected water stress		and scarcity.				with customers Engagement with public policy makers Engagement with suppliers Infrastructure investment Increased capital expenditure Increased investment in new technology		
United States of America	Colorado River (Caribbean Sea)	Physical-Projected water stress	Plant/production disruption leading to reduced output	Declining Ogallala Aquifer water supply is increasing regional projected water stress and scarcity.	>6 years	Unlikely	Low	Engagement with community Engagement with customers Engagement with public policy makers Increased capital expenditure Increased investment in new technology		

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
United States of America	St. Lawrence	Physical-Drought Physical-Flooding	Plant/production disruption leading to reduced output	Drought reducing water supply to hydropower generation. Flooding may cause damage to company infrastructure located in the flooded watercourse.	Unknown	Unknown	Low	Develop flood emergency plans Engagement with community Engagement with other stakeholders in the river basin		

W3.2d

Please list the inherent water risks that could generate a substantive change in your business operations, revenue or expenditure, the potential impact to your supply chain and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
United States of America	Mississippi River	Physical-Drought Physical-Flooding	Higher operating costs	Widespread and/or severe drought may cause the company to exercise water contingency plans, which	Unknown	Unknown	Low	Engagement with other stakeholders in the river basin		

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				are higher cost than typical water supplies. Would affect a very small subset of plants. Flooding may cause damage to company infrastructure located in the flooded watercourse.				Engagement with suppliers Infrastructure investment Infrastructure maintenance		

W3.2e

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your direct operations that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain

W3.2f

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your supply chain that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain

W3.2g

Please choose the option that best explains why you do not know if your organization is exposed to water risks that could generate a substantive change in your business operations, revenue or expenditure and discuss any future plans you have to assess this

Primary reason	Future plans

Further Information

Page: W4. Water Opportunities

W4.1

Does water present strategic, operational or market opportunities that substantively benefit/have the potential to benefit your organization?

Yes

W4.1a

Please describe the opportunities water presents to your organization and your strategies to realize them

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Comment
United States of America	Carbon management Other: Renewable investments	One of our major corporate business strategies is referred to as “steel for fuel.” Under this strategy, we are investing in economic wind projects where the cost to build the facilities is offset by future fuel savings. The savings are currently significant because of low wind prices and available tax credits. Increasing our use of renewables has helped us manage our carbon footprint, but simultaneously has also helped us decrease our water footprint and risk. We recently announced plans for the largest multi-state wind investment in the country, adding over 3GW of wind that will save customers billions in future fuel costs. This investment will enable the long-term financial growth of our company and contributes to our strategic advantage. Our successful implementation of these wind projects ensures our customers continue to receive reliable, low-cost energy and increased access to renewable energy resources.	Current-up to 1 year	This investment strategy helps our financial performance along with our ability to manage carbon emission and simultaneously reduces water risk.

W4.1b

Please choose the option that best explains why water does not present your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain

W4.1c

Please choose the option that best explains why you do not know if water presents your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain

Further Information

Module: Accounting

Page: W5. Facility Level Water Accounting (I)

W5.1

Water withdrawals: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
Facility 1	United States of America	Mississippi River	Cherokee	7579	Higher	Changes in water use are due to annual variability in generation. Raw water, wastewater effluent, and municipal treated water
Facility 2	United States of America	Mississippi River	Comanche	16123	Higher	Changes in water use are due to annual variability in generation. Raw water
Facility 3	United States of America	Mississippi River	Fort Saint Vrain	3628	Lower	Changes in water use are due to annual variability in generation. Raw water, municipal treated water
Facility 4	United	Mississippi River	Pawnee	5649	Lower	Changes in water use are due to annual

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
	States of America					variability in generation. Raw water
Facility 5	United States of America	Mississippi River	Rocky Mountain Energy Center	1964	Higher	Changes in water use are due to annual variability in generation. Raw water
Facility 6	United States of America	Mississippi River	Valmont Station	1377	Lower	Raw water, municipal treated. Diversions in the spring were less due to a full reservoir.
Facility 7	United States of America	Colorado River (Pacific Ocean)	Hayden Station	5874	Lower	Changes in water use are due to annual variability in generation. Changes in water use are due to annual variability in generation.
Facility 8	United States of America	Colorado River (Caribbean Sea)	Cunningham	2541	Higher	Groundwater Changes in water use are due to annual variability in generation.
Facility 9	United States of America	Colorado River (Caribbean Sea)	Maddox	1373	Lower	Groundwater Changes in water use are due to annual variability in generation.
Facility 10	United States of America	Mississippi River	Harrington	12624	Lower	Wastewater effluent Changes in water use are due to annual variability in generation.
Facility 11	United States of America	Mississippi River	Nichols	1586	Higher	Wastewater effluent Changes in water use are due to annual variability in generation.
Facility 12	United States of America	Brazos River	Jones Station	3045	Lower	Wastewater effluent Changes in water use are due to annual variability in generation.
Facility 13	United States of America	Brazos River	Tolk	10761	Lower	Groundwater Changes in water use are due to annual variability in generation.

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
Facility 14	United States of America	Brazos River	Plant X	1896	Lower	Groundwater Changes in water use are due to annual variability in generation.
Facility 15	United States of America	Mississippi River	A.S. King	451477	Lower	Raw water Changes in water use are due to annual variability in generation.
Facility 16	United States of America	Mississippi River	Black Dog	124190	Lower	Raw water Changes in water use are due to annual variability in generation.
Facility 17	United States of America	Mississippi River	High Bridge	216657	Higher	Raw water Changes in water use are due to annual variability in generation.
Facility 18	United States of America	Mississippi River	Prairie Island	708728	Higher	Raw water Changes in water use are due to annual variability in generation.
Facility 19	United States of America	Mississippi River	Red Wing	57997	Higher	Raw water Changes in water use are due to annual variability in generation.
Facility 20	United States of America	Mississippi River	Riverside	148212	Higher	Raw water Changes in water use are due to annual variability in generation.
Facility 21	United States of America	Mississippi River	Sherco	26020	About the same	Raw water The same
Facility 22	United States of America	Mississippi River	Wilmarth	29150	Lower	Raw water Changes in water use are due to annual variability in generation.
Facility 23	United States of America	St. Lawrence	Bay Front	41515	Lower	Raw water Changes in water use are due to annual variability in generation.

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
Facility 24	United States of America	Mississippi River	French Island	45126	Higher	Raw water Changes in water use are due to annual variability in generation.
Facility 25	United States of America	Mississippi River	Monticello Nuclear	513930	Higher	Raw water Changes in water use are due to annual variability in generation.

Further Information

Page: W5. Facility Level Water Accounting (II)

W5.1a

Water withdrawals: for the reporting year, please provide withdrawal data, in megaliters per year, for the water sources used for all facilities reported in W5.1

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment
Facility 1	3673	0	0	0	0	0	821	3085	
Facility 2	16123	0	0	0	0	0	0	0	
Facility 3	3394	0	0	0	0	0	234	0	
Facility 4	5649	0	0	0	0	0	0	0	

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment
Facility 5	1964	0	0	0	0	0	0	0	
Facility 6	1337	0	0	0	0	0	40	0	
Facility 7	5874	0	0	0	0	0	0	0	
Facility 8	0	0	0	0	2541	0	0	0	
Facility 9	0	0	0	0	1373	0	0	0	
Facility 10	0	0	0	0	0	0	0	12624	
Facility 11	0	0	0	0	0	0	0	1586	
Facility 12	0	0	0	0	0	0	0	3045	
Facility 13	0	0	0	0	10204	0	0	557	
Facility 14	0	0	0	0	1896	0	0	0	
Facility 15	451477	0	0	0	0	0	0	0	
Facility 16	124190	0	0	0	0	0	0	0	
Facility 17	216657	0	0	0	0	0	0	0	
Facility 18	708728	0	0	0	0	0	0	0	
Facility 19	57997	0	0	0	0	0	0	0	
Facility 20	148212	0	0	0	0	0	0	0	
Facility 21	26020	0	0	0	0	0	0	0	
Facility 22	29150	0	0	0	0	0	0	0	
Facility 23	41515	0	0	0	0	0	0	0	
Facility 24	45126	0	0	0	0	0	0	0	
Facility 25	513930	0	0	0	0	0	0	0	

W5.2

Water discharge: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Total water discharged (megaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting year?	Please explain
Facility 1	1289	Lower	Changes in water use are due to annual variability in generation.
Facility 2	3200	Higher	Changes in water use are due to annual variability in generation.
Facility 3	1576	Higher	Changes in water use are due to annual variability in generation.
Facility 4	0		No discharge
Facility 5	0		No discharge
Facility 6	0		No discharge
Facility 7	0		No discharge
Facility 8	515	Higher	Changes in water use are due to annual variability in generation.
Facility 9	523	Lower	Changes in water use are due to annual variability in generation.
Facility 10	2900	About the same	The same
Facility 11	271	Higher	Changes in water use are due to annual variability in generation.
Facility 12	553	Lower	Changes in water use are due to annual variability in generation.
Facility 13	0		No discharge
Facility 14	743	Lower	Changes in water use are due to annual variability in generation.
Facility 15	451280	Lower	Changes in water use are due to annual variability in generation.
Facility 16	124065	Lower	Changes in water use are due to annual variability in generation.
Facility 17	216605	Higher	Changes in water use are due to annual variability in generation.
Facility 18	708439	Higher	Changes in water use are due to annual variability in generation.
Facility 19	57997	Higher	Changes in water use are due to annual variability in generation.

Facility reference number	Total water discharged (megaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting year?	Please explain
Facility 20	148064	Higher	Changes in water use are due to annual variability in generation.
Facility 21	0		No discharge
Facility 22	29150	Lower	Changes in water use are due to annual variability in generation.
Facility 23	41497	Lower	Changes in water use are due to annual variability in generation.
Facility 24	45098	Higher	Changes in water use are due to annual variability in generation.
Facility 25	513886	Higher	Changes in water use are due to annual variability in generation.

W5.2a

Water discharge: for the reporting year, please provide water discharge data, in megaliters per year, by destination for all facilities reported in W5.2

Facility reference number	Fresh surface water	Municipal/industrial wastewater treatment plant	Seawater	Groundwater	Wastewater for another organization	Comment
Facility 1	1289	0	0	0	0	
Facility 2	3200	0	0	0	0	
Facility 3	1576	0	0	0	0	
Facility 4	0	0	0	0	0	
Facility 5	0	0	0	0	0	
Facility 6	0	0	0	0	0	
Facility 7	0	0	0	0	0	

Facility reference number	Fresh surface water	Municipal/industrial wastewater treatment plant	Seawater	Groundwater	Wastewater for another organization	Comment
Facility 8	0	0	0	0	515	
Facility 9	0	0	0	0	523	
Facility 10	0	0	0	0	2900	
Facility 11	0	0	0	0	271	
Facility 12	0	0	0	0	553	
Facility 13	0	0	0	0	0	
Facility 14	0	0	0	0	743	
Facility 15	451280	0	0	0	0	
Facility 16	124065	0	0	0	0	
Facility 17	216605	0	0	0	0	
Facility 18	708439	0	0	0	0	
Facility 19	57997	0	0	0	0	
Facility 20	148064	0	0	0	0	
Facility 21	0	0	0	0	0	
Facility 22	29150	0	0	0	0	
Facility 23	41497	0	0	0	0	
Facility 24	45098	0	0	0	0	
Facility 25	513886	0	0	0	0	

W5.3

Water consumption: for the reporting year, please provide water consumption data for all facilities reported in W3.2a

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain
Facility 1	6290	Higher	Changes in water use are due to annual variability in generation.
Facility 2	12923	Higher	Changes in water use are due to annual variability in generation.
Facility 3	2052	Lower	Changes in water use are due to annual variability in generation.
Facility 4	5649	Lower	Changes in water use are due to annual variability in generation.
Facility 5	1964	Higher	Changes in water use are due to annual variability in generation.
Facility 6	1377	Lower	Changes in water use are due to annual variability in generation.
Facility 7	5874	Lower	Changes in water use are due to annual variability in generation.
Facility 8	2026	Higher	Changes in water use are due to annual variability in generation.
Facility 9	850	Lower	Changes in water use are due to annual variability in generation.
Facility 10	9724	Lower	Changes in water use are due to annual variability in generation.
Facility 11	1315	Higher	Changes in water use are due to annual variability in generation.
Facility 12	2492	Lower	Changes in water use are due to annual variability in generation.
Facility 13	10761	Lower	Changes in water use are due to annual variability in generation.
Facility 14	1153	Higher	Changes in water use are due to annual variability in generation.
Facility 15	197	Lower	Changes in water use are due to annual variability in generation.
Facility 16	125	Lower	Changes in water use are due to annual variability in generation.
Facility 17	52	Lower	Changes in water use are due to annual variability in generation.

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain
Facility 18	289	Higher	Changes in water use are due to annual variability in generation.
Facility 19	0	About the same	Same
Facility 20	148	Lower	Changes in water use are due to annual variability in generation.
Facility 21	26020	About the same	Same
Facility 22	0	About the same	Same
Facility 23	18	Lower	Changes in water use are due to annual variability in generation.
Facility 24	28	Higher	Changes in water use are due to annual variability in generation.
Facility 25	44	Lower	Changes in water use are due to annual variability in generation.

W5.4

For all facilities reported in W3.2a what proportion of their water accounting data has been externally verified?

Water aspect	% verification	What standard and methodology was used?
Water withdrawals- total volumes		
Water withdrawals- volume by sources		
Water discharges- total volumes		
Water discharges- volume by destination		
Water discharges- volume by treatment method		
Water discharge quality data- quality by standard effluent parameters		

Water aspect	% verification	What standard and methodology was used?
Water consumption- total volume		

Further Information

Module: Response

Page: W6. Governance and Strategy

W6.1

Who has the highest level of direct responsibility for water within your organization and how frequently are they briefed?

Highest level of direct responsibility for water issues	Frequency of briefings on water issues	Comment
Board of individuals/Sub-set of the Board or other committee appointed by the Board	Scheduled-annual	Briefings occur at the Board level at least annually, but water issues are also dealt with as-needed throughout the year. The Board of Director's Operations, Nuclear, Environmental and Safety Committee provides oversight of the company's environmental strategy and compliance. As water impacts our resource and operational decisions, the Operations Department and leadership also perform the water risk analysis and have oversight over key water decisions.

W6.2

Is water management integrated into your business strategy?

Yes

W6.2a

Please choose the option(s) below that best explains how water has positively influenced your business strategy

Influence of water on business strategy	Please explain
Other:	Water has positively impacted the way we strategically operate our plants. As we increase our renewable energy fleet, we are seeing positive impacts on our water footprint. A reliable water source is essential to producing power at our hydroelectric and thermal generating plants. We carefully manage our water resources by seeking responsible and secure water supply options. We are continually working to conserve water where we can and ensuring we maintain water quality, especially when water is used and then returned to the environment. We have strategic water resource plans that are updated annually to reflect our current operational requirements, local climate conditions and water use. Throughout the year we conduct a variety of activities to accurately predict and plan for future water supplies, which include: forecasting plant water requirements based on anticipated electric generation; accounting for the water we need and use; monitoring snowpack reports; studying stream flow forecasts; reviewing seasonal climate projections; and monitoring changes to the Ogallala Aquifer, which is the primary aquifer that underlies much of the region in Texas and New Mexico that we serve.

W6.2b

Please choose the option(s) below that best explains how water has negatively influenced your business strategy

Influence of water on business strategy	Please explain

W6.2c

Please choose the option that best explains why your organization does not integrate water management into its business strategy and discuss any future plans to do so

Primary reason	Please explain

W6.3

Does your organization have a water policy that sets out clear goals and guidelines for action?

Yes

W6.3a

Please select the content that best describes your water policy (tick all that apply)

Content	Please explain why this content is included
Publicly available Company-wide	Our approach to water management and all water-related information is provided to the public through the company's annual corporate responsibility reporting.

W6.4

How does your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) during the most recent reporting year compare to the previous reporting year?

Water CAPEX (+/- % change)	Water OPEX (+/- % change)	Motivation for these changes

Further Information

https://www.xcelenergy.com/company/corporate_responsibility_report/library_of_report_briefs/water_management

Page: W7. Compliance

W7.1

Was your organization subject to any penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations in the reporting year?

Yes, not significant

W7.1a

Please describe the penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations and your plans for resolving them

Facility name	Incident	Incident description	Frequency of occurrence in reporting year	Financial impact	Currency	Incident resolution
Nichols and Harrington	Penalty	In the summer of 2015, Amarillo, Texas experienced record rainfall and flooding. As a result, several of the retention ponds at our Nichols and Harrington plants exceeded capacity and discharged wastewater to a permitted outfall. The discharged water was contained and migration was held to a minimum. However, several parameters of the discharge exceeded permit limits due to heavy sedimentation washing into the ponds.	1	15000	USD($)	We reported these exceedances to the Texas Commission on Environmental Quality (TCEQ), which issued a compliance order. We met with TCEQ and petitioned to have the order removed due to the fact that the exceedances were caused by historical rainfall and flooding. TCEQ agreed but concluded that the record rainfall was not an affirmative defense to the permit exceedances. A final penalty of $15,000 was negotiated in 2016 for settlement of the order.
Cabin Creek	Penalty	Working with CDPHE, Xcel Energy agreed in 2016 to enter into a Compliance Order on Consent and to pay a penalty to address a potential issue involving our Cabin Creek Hydro Plant in Colorado. In August of 2013, a very light sheen was first observed on the tailrace at the facility. The sheen was identified as a petroleum substance, and because it was intermittent, was especially difficult to determine the exact cause. The area was contained to prevent any migration to other waterways.	1	10000	USD($)	We self-reported the issue and worked cooperatively with the Department of Public Health and Environment (CDPHE) for approximately two years, evaluating and implementing different solutions to remedy the situation. As a final remedy to reconcile the order, Xcel Energy installed an oil-water separator in 2016 and paid a penalty of $10,000.

W7.1b

What proportion of your total facilities/operations are associated with the incidents listed in W7.1a?

.84%

W7.1c

Please indicate the total financial impacts of all incidents reported in W7.1a as a proportion of total operating expenditure (OPEX) for the reporting year. Please also provide a comparison of this proportion compared to the previous reporting year

Impact as % of OPEX	Comparison to last year
0	No change

Further Information

Page: W8. Targets and Initiatives

W8.1

Do you have any company wide targets (quantitative) or goals (qualitative) related to water?

No

W8.1a

Please complete the following table with information on company wide quantitative targets (ongoing or reached completion during the reporting period) and an indication of progress made

Category of target	Motivation	Description of target	Quantitative unit of measurement	Base-line year	Target year	Proportion of target achieved, % value

W8.1b

Please describe any company wide qualitative goals (ongoing or reached completion during the reporting period) and your progress in achieving these

Goal	Motivation	Description of goal	Progress

W8.1c

Please explain why you do not have any water-related targets or goals and discuss any plans to develop these in the future

We do not currently have a water goal or target; however, we have significant plans to add more renewable energy in the next 5 years. We anticipate these plans will continue to help us lower our water consumption.

Further Information

Module: Linkages/Tradeoff

Page: W9. Managing trade-offs between water and other environmental issues

W9.1

Has your organization identified any linkages or trade-offs between water and other environmental issues in its value chain?

Yes

W9.1a

Please describe the linkages or trade-offs and the related management policy or action

Environmental issues	Linkage or trade-off	Policy or action
Increased integration of renewable generation	Linkage	By far, the majority of Xcel Energy's water use is for generating electricity, so we have focused our attention on our generation fleet. As we increase the use of wind and solar generation, we save water as these energy sources require no water to produce power. In fact, since 2005, we have reduced our water consumption associated with electric generation by 35%. This linkage has largely been created as we have developed our wind portfolio. We have been the No. 1 utility wind provider in the country for over a decade and recently announced the largest multi-state wind investment in the country. Further, we have a clear investment strategy called “steel for fuel” which refers to the capital costs of building wind farms (steel) which can be offset by billions of dollars in future fuel savings (fuel). At this time, the savings are significant because of low wind prices and production tax credits. All of these efforts are helping us reduce our water consumption and thereby risk without significantly raising customer energy costs.
Energy efficiency programs	Linkage	At Xcel Energy, we are empowering customers with energy solutions that give them more control over their energy use and their monthly energy bills. Our comprehensive portfolio of more than 150 programs is designed to meet individual needs and preferences—from rebate programs to energy audits to recycling services. We provide energy-saving programs designed to meet the individual interests of all types of customers, offering everyone the opportunity to participate. As more customers participate and save more energy, there is less demand for electricity on the system and less need for new generation. By reducing customer consumption, we are able to avoid water risks.
Retirement of coal generation	Linkage	By far, most of our water use occurs at thermal generating plants where water is used to produce steam for generating electricity and also for cooling equipment. As we retire our coal fleet, we reduce our water usage and consumption and help improve the water efficiency of the remaining fleet. By 2026, we will shut down more than 40 percent of the coal units we owned in 2005.

Further Information

https://www.xcelenergy.com/company/corporate_responsibility_report/library_of_report_briefs/water_management
https://www.xcelenergy.com/company/corporate_responsibility_report/library_of_report_briefs/customer_energy_efficiency_solutions
https://www.xcelenergy.com/company/corporate_responsibility_report/library_of_report_briefs/renewable_energy

Module: Sign Off

Page: Sign Off

W10.1

Please provide the following information for the person that has signed off (approved) your CDP water response

Name	Job title	Corresponding job category
Frank Prager	Vice President, Policy and Federal Affairs	Other: Vice President

W10.2

Please indicate that your organization agrees for CDP to transfer your publicly disclosed data regarding your response strategies to the CEO Water Mandate Water Action Hub.

Note: Only your responses to W1.4a (response to impacts) and W3.2c&d (response to risks) will be shared and then reviewed as a potential collective action project for inclusion on the WAH website.

By selecting Yes, you agree that CDP may also share the email address of your registered CDP user with the CEO Water Mandate. This will allow the Hub administrator to alert your company if its response data includes a project of potential interest to other parties using water resources in the geographies in which you operate. The Hub will publish the project with the associated contact details. Your company will be provided with a secure log-in allowing it to amend the project profile and contact details.

No

Further Information

CDP 2017 Water 2017 Information Request