

W0. Introduction

W0.1

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

Entergy Corporation (NYSE: ETR) is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 megawatts of electric generating capacity, including over 8,000 megawatts of nuclear power. Entergy delivers electricity to 2.9 million utility customers in Arkansas, Louisiana, Mississippi and Texas. Entergy has annual revenues of \$11 billion and approximately 13,600 employees.

Entergy's leadership in sustainability and environmental stewardship has been a hallmark of who we are for nearly two decades. It is a critical part of our future too. In 2002, Entergy's board of directors adopted a visionary sustainability and environmental [statement](#) to "develop and conduct our business in a responsible manner that is environmentally, socially, and economically sustainable." We demonstrate our leadership through our daily actions, such as our climate strategy, environmental stewardship, attracting and developing talent, continuous performance improvement, and initiatives that strengthen communities. Strong corporate governance ensures continued transparency, accountability, successful execution on our strategy, and alignment with the company's mission.

Public reporting of environmental, social, and governance metrics has become increasingly important to investors and customers, many of whom have established their own sustainability goals. In addition to providing full disclosure of financially material information in our Securities and Exchange Commission reporting, Entergy collects ESG metrics and supporting narratives and makes these available through annual disclosures available here:

<https://www.energy.com/sustainability/esg/>

https://www.energy.com/investor_relations/annual_publications/

Entergy uses benchmarking and interaction with internal and external experts and trade groups to refine our suite of sustainability metrics and to ensure data integrity and proper management. For example, we recently completed a preliminary comparison of Entergy's public information to the Sustainability Accounting Standards Board recommendations. Although some gaps remain, our public reporting is largely aligned with the SASB standards. Closure of these gaps, where appropriate, is a goal for 2020. In 2019 we released our Climate Scenario Analysis and Evaluation of Risks and Opportunities, available here:

<https://www.energy.com/userfiles/content/environment/docs/EntergyClimateScenarioAnalysis.pdf>

Entergy's climate report sets forth the next decade of action toward a new greenhouse gas emissions reduction goal. By 2030, Entergy will produce 50 percent fewer carbon emissions per MWh of electricity generated than we did in 2000. The report is aligned with the Task Force for Climate-related Financial Disclosures, of which Entergy is a supporter.

W-EU0.1a

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

Electricity generation

Transmission

Distribution

Other, please specify (1.) Gas storage, transmission and distribution 2.) Smart grids/ demand response 3.) Battery storage 4.) Micro Grids)

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	2401	9.26	8214
Lignite	0	0	0
Oil	33	0.13	15
Gas	15341	59.15	52657
Biomass	0	0	0
Waste (non-biomass)	0	0	0
Nuclear	8087	31.18	37484
Fossil-fuel plants fitted with carbon capture and storage	0	0	0
Geothermal	0	0	0
Hydropower	73	0.28	224
Wind	0	0	0
Solar	3	0	5
Marine	0	0	0
Other renewable	0	0	0
Other non-renewable	0	0	0
Total	25938	100	98599

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 2019	December 31 2019

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 financial 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	Vital	Vital	Direct Use - Entergy produces electricity from steam electric power plants that use large amounts of freshwater. 88.50% of Entergy's power generation fleet utilizes freshwater for cooling, boiler make-up water and house service water needs. The water quantity, quality, biological diversity and ambient temperatures for each freshwater body are all factors that are vitally important for Entergy's current and future power plant operations. Indirect Use - Entergy's suppliers use freshwater to produce various products that are important to company operations. An interruption in supply of freshwater could result in a disruption in product availability. Future water dependency will likely not differ in Entergy's direct and indirect operations, as this has been the trend observed over recent years.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Direct Use - 11.50% of Entergy's power generation fleet utilizes brackish water for cooling, boiler make-up water and house service water needs. The water quantity, quality, biological diversity and ambient temperatures for each of these sources are all factors that are important for Entergy's current and future power plant operations. Indirect Use - Entergy's suppliers use brackish water to produce various products that are important to company operations. An interruption in supply of these water sources could result in a disruption in product availability. Future water dependency will likely not differ in Entergy's direct and indirect operations, as this has been the trend observed over recent years.

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%	Entergy monitors 100% of its sites for water withdrawals. The volume of water withdrawals at the power generation plants are measured either by direct metering or, in many cases, estimated using water pump capacity and run time. Other company locations (service centers, office buildings, etc.) are supplied primarily by municipal water sources.
Water withdrawals – volumes by source	100%	Entergy monitors 100% of its sites for water withdrawals by source. The volume of water withdrawals at the power generation plants are measured either by direct metering or, in many cases, estimated using water pump capacity and run time. Other company locations (service centers, office buildings, etc.) are supplied primarily by municipal water sources.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Entergy monitors 100% of its sites for water withdrawals. Water withdrawals from the power generation plants are permitted by the appropriate regulatory agency. These permits require monitoring of various water quality parameters. All of this information is reported to the permitting agency on a regular basis. Thus, water quality is monitored and protected through robust permitting and compliance programs.
Water discharges – total volumes	100%	Entergy monitors 100% of its sites for water discharges. Water discharges from the power generation plants are permitted by the appropriate regulatory agency. These permits identify the receiving water body, require an estimate of discharge flow, identify the treatment method, and require monitoring of various water quality parameters. All of this information is reported to the permitting agency on a regular basis. Other company locations (service centers, office buildings, etc.) are serviced primarily by municipal treatment systems.
Water discharges – volumes by destination	100%	Entergy monitors 100% of its sites for water discharges. Water discharges from the power generation plants are permitted by the appropriate regulatory agency. These permits identify the receiving water body, require an estimate of discharge flow, identify the treatment method, and require monitoring of various water quality parameters. All of this information is reported to the permitting agency on a regular basis. Other company locations (service centers, office buildings, etc.) are serviced primarily by municipal treatment systems.
Water discharges – volumes by treatment method	100%	Entergy monitors 100% of its sites for water discharges. Water discharges from the power generation plants are permitted by the appropriate regulatory agency. These permits identify the receiving water body, require an estimate of discharge flow, identify the treatment method, and require monitoring of various water quality parameters. All of this information is reported to the permitting agency on a regular basis. Other company locations (service centers, office buildings, etc.) are serviced primarily by municipal treatment systems.
Water discharge quality – by standard effluent parameters	100%	Entergy monitors 100% of its sites for water discharges. Water discharges from the power generation plants are permitted by the appropriate regulatory agency. These permits identify the receiving water body, require an estimate of discharge flow, identify the treatment method, and require monitoring of various water quality parameters. All of this information is reported to the permitting agency on a regular basis. Other company locations (service centers, office buildings, etc.) are serviced primarily by municipal treatment systems.
Water discharge quality – temperature	100%	Entergy monitors 100% of its sites for water discharges. Water discharges from the power generation plants are permitted by the appropriate regulatory agency. These permits identify the receiving water body, require an estimate of discharge flow, identify the treatment method, and require monitoring of various water quality parameters- including temperature. All of this information is reported to the permitting agency on a regular basis. Other company locations (service centers, office buildings, etc.) are serviced primarily by municipal treatment systems.
Water consumption – total volume	100%	Entergy monitors 100% of its sites for water consumption. Water consumption at the power generation plants occurs primarily through evaporative losses during the cooling process. Entergy estimates these losses based on the technology employed at each power plant using industry loss factors. Water consumption at other company locations (service centers, office buildings, etc.) is only a small fraction of the evaporative losses described above.
Water recycled/reused	100%	Entergy monitors 100% of its recycled water. Entergy recycles water in some of our cooling systems and operate one air-cooled combined-cycle gas unit. Recycled water quantities being utilized for these operations are monitored.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Entergy monitors 100% of its sites service water. All of Entergy's workers are provided with clean water for drinking, cooking and cleaning purposes; adequate facilities for excreta purposes, solid waste management and drainage are provided and monitored by public water systems provider. For those facilities that have private water systems, we have groundwater or surface water withdrawal limits.

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
Fulfillment of downstream environmental flows	100%	Entergy's hydropower facilities monitor 100% of their downstream environmental flows in order to prove compliance with minimum flow requirements in place for fisheries and recreational purposes.
Sediment loading	100%	Construction management processes, such as utilizing above-grade land clearing processes in rights-of-way development, have reduced siltation and erosion arising from the construction activities and the subsequent sediment deposition in jurisdictional waters of the U.S, across Entergy's operations. Entergy employs best management practices to manage and monitor run off from permitted lake bed disturbances such as seawalls, dredges, and excavations.
Other, please specify	100%	Oil and grease concentrations and pH are monitored at all Entergy hydropower facilities, to ensure compliance with their NPDES permitting requirements.

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	11153415.1	About the same	Total water withdrawal for the year 2018 was 11,061,162 megaliters/year, indicating a 0.83% increase.
Total discharges	10978964.76	About the same	Total water discharged for the year 2018 was 10,925,101 megaliters/year, indicating a 0.49% increase.
Total consumption	174450	Higher	Total water consumption for the year 2018 was 136,060 megaliters/year, indicating a 28.22% increase.

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	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	1-10	Lower	WRI Aqueduct	The Lewis Creek Power Plant in Willis, Texas, is the only Entergy power plant that operates in a water-constrained area. Even this area is not classified as water-stressed as defined by sustainability analyst RobecoSAM and the DJSI; however, the facility is located in Montgomery County, Texas, in the Lone Star Groundwater Conservation District ("LSGCD"), an area identified as water-constrained due to a current water use exceeding the local aquifer's sustainable yield by ~20% (25 billion gallons use vs. 21 billion gallons yield). The World Resource Institute's Aqueduct water risk atlas also notes that this area is categorized as medium to high risk based on physical quantity, quality, regulatory and reputational risk categories. Entergy undertook a long-term strategic study of water availability for its Lewis Creek Plant. The study included analysis of the groundwater wells and water plant system. In conjunction with the LSGCD, the facility developed and executed a plan to reduce water withdrawal by 30% through process design changes. By working with the district to optimize water use and leveraging best practices, Lewis Creek was able to exceed its water conservation goal of 30 percent water withdrawal by 2016 – a level also maintained throughout 2019. When looking at the actual water withdrawal quantity for 2019 and comparing this value with that of the previous reporting year, the amount of water withdrawn from Lewis Creek has decreased by 0.39%.

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	6457878.52	Higher	Water withdrawal for 2018 was 5,911,880 megaliters/year, indicating a 9.24% increase. Entergy produces electricity from steam electric power plants that use large amounts of freshwater. Water withdrawal from this source is relevant to the company, as it directly impacts plant operations.
Brackish surface water/Seawater	Relevant	4646097.77	Higher	Water withdrawal for 2018 was 4,575,220.53 megaliters/year, indicating a 1.54% increase. Entergy's power generation fleet utilizes brackish water for cooling, boiler make-up water and house service water needs. Water withdrawal from this source is relevant to the company, as it directly impacts plant operations.
Groundwater – renewable	Relevant	49438.81	Higher	Water withdrawal for 2018 was 27,875.82 megaliters/year, indicating a 77.35% increase. Water withdrawal from this source is relevant as it directly impacts Entergy's plant operations. Entergy produces electricity from steam electric power plants that utilize water from this source.
Groundwater – non-renewable	Relevant	0	About the same	Quantity has not changed since 2018, since Entergy did not withdraw water from this source for both years.
Produced/Entrained water	Relevant	0	About the same	Quantity has not changed since 2018, since Entergy did not withdraw water from this source for both years.
Third party sources	Relevant	0	About the same	Quantity has not changed since 2018, since Entergy did not withdraw water from this source for both years.

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	6323439.01	Higher	Water discharge for 2018 was 5,775,820 megaliters/year, indicating a 9.48% increase. Water discharged to this source is relevant as Entergy withdraws a significant amount of water from freshwater sources to facilitate plant operations. Discharging this water back to the source is how Entergy minimizes water usage at its plants.
Brackish surface water/seawater	Relevant	4643415.35	Higher	Water discharge for 2018 was 4,575,220 megaliters/year, indicating a 1.49 % decrease. Water discharged to this source is relevant as Entergy withdraws a significant amount of water from brackish surface water sources to facilitate plant operations. Discharging this water back to the source is how Entergy minimizes water usage at its plants.
Groundwater	Relevant	12110.39	Higher	Water discharge for 2018 was 7359.06 megaliters/year, indicating a 64.56% increase. Water discharge to this source is relevant as Entergy withdraws a water from groundwater sources to facilitate plant operations. Discharging this water back to the source is how Entergy minimizes water usage at its plants.
Third-party destinations	Relevant	0	Higher	Quantity has not changed since 2018, since Entergy facilities did not discharge water to this source for both years.

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
118.63	Total water withdrawals	MWh	Higher	Water intensity value (m3) in 2018 was 105.73, indicating a 3.58% increase from last year.

W1.4

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

Yes, our customers or other value chain partners

W1.4c

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

Protecting the environment is one of many ways Entergy powers life and creates sustainable value for our stakeholders — customers, employees, communities and owners – and this has been true for many years. For 18 consecutive years the Dow Jones Sustainability Index, has recognized our environmental and other sustainability actions by including Entergy on either its World or North America index or both. Since 2014 Entergy has scored a perfect 100 in the water related risks category of the DJSI each year. Additionally, Entergy takes part in engaging and educating customers through our website by sharing about our water management strategy. Entergy demonstrated its engagement with its customers in numerous ways. Entergy contributes to efforts related to water availability in the areas in which we operate. Just about ten years ago, we made improvements to our transmission system totalling about \$300 million. Today, we are investing approximately \$1 billion annually to improve our transmission infrastructure and reliability. In 2019 alone we completed projects at a cost of more than \$1 billion dollars that included facilities designed to better withstand storms. Entergy deploys storm guys on critical distribution structures in open marsh areas along the coast. Storm guys are tensioned cables designed to add stability to our structures. Additionally, Entergy evaluates hardening strategies from a customer perspective, weighing the benefits of fewer and shorter outages against the high costs of hardening the system which our customers ultimately must pay for.

- We propose projects and strategies we believe are valuable for our customers.
- Our regulators provide guidance on the prudence of investments, including storm hardening strategies.
- Maximizing resiliency everywhere is not cost-effective for our customers but targeted programs that cost-effectively reduce the risks to reliability posed by major storms is good for all stakeholders.

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?

No

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?

Virtually all of Entergy's discharges to water are controlled either by state-issued, federally enforceable permits issued under the National Pollution Discharge Elimination System of the federal Clean Water Act or by similar state programs. Entergy facilities operate under approximately 40,000 specific water pollution control permit requirements. These permits have numeric water quality criteria which have been developed for specific parameters to protect aquatic life, human health and in some cases, wildlife from the deleterious effects of pollutants. Across our operations, Entergy protects water resources by maintaining a compliance rate with state and federal water pollution control permit requirements of at least 99.99% from year to year.

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	A hydrocarbon is a compound of hydrogen and carbon. These are typically the chief components in many types of fuels and products we use every day. They can come in the form of a gas, liquid, solid, or polymers. The exposure or injection of these substances can cause significant health risks. Direct skin contact can happen, causing local skin irritation and, rarely, leading to systemic disease. However, prolonged exposure can lead to tissue breakdown and superficial, partial thickness chemical burns. Severe, full-thickness chemical burns can lead to absorption and acute toxic systemic manifestations. Ingestion and inhalation/aspiration of hydrocarbons can also occur, which may signify disease and lead to systemic toxicity and morbidity and mortality. (Curtis J, Sergent SR. Hydrocarbon Toxicity.)	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community/stakeholder engagement Emergency preparedness	Hydrocarbon content in discharged water is closely monitored per stipulations in state-issued, federally enforceable permits issued under the National Pollution Discharge Elimination System of the federal Clean Water Act or by similar state programs. To aid with emergency response in the case of hydrocarbon leakage or spill, the Spill Prevention, Control, and Countermeasure (SPCC) Plan maintained by Entergy facilities, helps facilities prevent oil spills, as well as control a spill should one occur.
Radiation	Radiation is a form of energy. It comes from radioactive elements, natural and man-made, whose atoms are unstable. Radiation is measured in units called millirems. A millirem is a unit used to measure radiation dose to humans. For radiation to cause any measurable biological effect in human beings, most scientists agree that the exposure must reach about 25,000 millirems – in a single, short-time exposure. Per the US EPA, exposure to very high levels of radiation, can cause acute health effects such as skin burns and acute radiation syndrome (“radiation sickness”). It can also result in long-term health effects such as cancer and cardiovascular disease.	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community/stakeholder engagement Emergency preparedness	Federal standards drawn up and enforced by the Nuclear Regulatory Commission (NRC) require that workers at nuclear power plants receive no more than 5,000 millirems of radiation a year, which Entergy ensures strict compliance with. Emergencies at Entergy nuclear power plants are classified in four ways: 1) A Notification of Unusual Event is the least serious of the four emergency classifications. It means there is a problem that is being handled by plant workers. Strict federal rules require that a number of problems are reported as Unusual Events even though they pose no danger to the public. They are reported to the Nuclear Regulatory Commission and to the local and state officials. 2) An Alert is an event that could affect plant safety. Even though there is still no danger to the public, local and state officials may set up emergency operation centers in case the situation at the plant gets worse. 3) A Site Area Emergency is an event that could possibly affect the public. The sirens may be sounded to alert the public to listen to their radios for information and instructions. 4) A General Emergency is the most serious of the four emergency classifications. Local, state and federal authorities would take action to protect the public. Designated radio stations and the Emergency Alert System would continue to give information and instructions. If necessary, some areas would be sheltered or evacuated. Entergy maintains strict plans and protocols to prevent any nuclear emergencies from occurring, and procedures to take immediate action in the event of the occurrence of a nuclear event.
Thermal pollution	Thermal water pollution is the degradation of water quality due to a change in ambient water temperature. Multiple issues occur concurrently when heated water is released to an aquatic ecosystem. The most immediate change is a decrease in dissolved oxygen levels and rise in pH. Warm water cannot hold as much dissolved oxygen as cold water, and organic matter decomposes faster in warmer temperatures. The increase in decomposed aqueous nutrient concentrations causes eutrophication, most commonly realized as algae blooms, which block sunlight for underlying aquatic plants. Additionally, rapidly heated water accelerates the metabolism of cold blooded aquatic animals like fish, causing malnutrition due to insufficient food sources. Since the environment usually becomes more inhospitable to the area's aquatic fauna, many species leave while more vulnerable species may die, changing the biodiversity of both the original and invaded locations. (Brandon C, Thermal Water Pollution from Nuclear Power Plants)	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community/stakeholder engagement	Water temperature in discharged water is closely monitored per stipulations in state-issued, federally enforceable permits under the National Pollution Discharge Elimination System of the federal Clean Water Act or by similar state programs.
Coal combustion residuals	Per the US EPA website, Coal combustion residuals, commonly known as coal ash, are created when coal is burned by power plants to produce electricity. Coal ash is one of the largest types of industrial waste generated in the United States. In 2012, 470 coal-fired electric utilities generated about 110 million tons of coal ash. Coal ash contains contaminants like mercury, cadmium and arsenic. Without proper management, these contaminants can pollute waterways, ground water, drinking water, and the air. If eaten, drunk or inhaled, these toxicants can cause cancer and nervous system impacts such as cognitive deficits, developmental delays and behavioral problems. They can also cause heart damage, lung disease, respiratory distress, kidney disease, reproductive problems, gastrointestinal illness, birth defects, and impaired bone growth in children.	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community/stakeholder engagement	Pursuant to the EPA regulations, Entergy operates groundwater monitoring systems surrounding its coal combustion residual landfills located at White Bluff, Independence, and Nelson. In late-2017, Entergy determined that certain in-ground wastewater treatment system recycle ponds at its White Bluff and Independence facilities require management under the newly promulgated EPA regulations. In order to meet these regulations, one of two recycle ponds at White Bluff commenced closure in October 2018. Additionally, the second recycle pond at White Bluff plans to initiate closure on or before October 31, 2020. Any potential requirements for corrective action or operational changes under the new EPA rule continue to be assessed and plans are being forth to ensure continued compliance.

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?

1 to 3 years

Type of tools and methods used

Please select

Tools and methods used

Other, please specify (WRI Aqueduct)

Comment

Entergy uses an Enterprise Risk Management (ERM) program to identify, capture, and mitigate risks that would impede Supply Chain and the rest of Entergy from accomplishing its objectives. Facilitated sessions are conducted across the Company with each business leader, along with knowledgeable financial and operational personnel from each group. Since the original implementation of ERM, Internal Audit continues to monitor the functional groups with updating their risk profile. Water is identified Entergy has identified water as a "Risk Factor" in its public disclosures and this risk is described in the SEC Form 10-K and is evaluated/updated on a quarterly basis. Additionally, the Water Peer Group, which includes representatives from all of Entergy's business functions, monitors water stressed areas on a quarterly basis using the WRI Aqueduct map and data or similar resources. Some suppliers are not included in this assessment if they are judged to not be material users of water. Additionally, in 2019, Entergy corporate controls for managing risks were the EMS Policy and EMS Functional Procedure. Entergy's EMS policy establishes that business units identify and assess risks, including water supply and water quality that could impact their direct operations.

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?

1 to 3 years

Type of tools and methods used

Enterprise Risk Management

Tools and methods used

Other, please specify (WRI Aqueduct)

Comment

Entergy uses an Enterprise Risk Management (ERM) program to identify, capture, and mitigate risks that would impede Supply Chain and the rest of Entergy from accomplishing its objectives. Facilitated sessions are conducted across the Company with each business leader, along with knowledgeable financial and operational personnel from each group. Since the original implementation of ERM, Internal Audit continues to monitor the functional groups with updating their risk profile. Water is identified Entergy has identified water as a "Risk Factor" in its public disclosures and this risk is described in the SEC Form 10-K and is evaluated/updated on a quarterly basis. Additionally, the Water Peer Group, which includes representatives from all of Entergy's business functions, monitors water stressed areas on a quarterly basis using the WRI Aqueduct map and data or similar resources. Some suppliers are not included in this assessment if they are judged to not be material users of water.

Other stages of the value chain

Coverage

None

Risk assessment procedure

<Not Applicable>

Frequency of assessment

<Not Applicable>

How far into the future are risks considered?

<Not Applicable>

Type of tools and methods used

<Not Applicable>

Tools and methods used

<Not Applicable>

Comment

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, sometimes included	Reducing our water use and conserving water resources are priorities for Entergy. We look for opportunities to reduce water use in our operations while evaluating water availability and ensuring compliance with state and local permits and requirements. The method used to assess this issue was WRI water stress definition. Entergy is supporting an EPRI project that provides watershed level water mapping for the Lower Arkansas River Basin, which includes our White Bluff and Arkansas Nuclear One plants. The model takes into account historical water body and groundwater usages for every consumer in the basin and models availability for the next 40 years. Then it runs scenarios to guide future decision making for water users in the basin. Entergy undertook a long-term strategic study of water availability for its Lewis Creek Plant. The study included analysis of the groundwater wells and water plant system. In conjunction with the LSGCD, the facility developed and executed a plan to reduce water withdrawal by 30% through process design changes. By working with the district to optimize water use and leveraging best practices, Lewis Creek was able to exceed its water conservation goal of 30 percent water withdrawal by 2016 – a level also maintained throughout 2019.
Water quality at a basin/catchment level	Relevant, sometimes included	Reducing our water use and conserving water resources are priorities for Entergy. We look for opportunities to reduce water use in our operations while evaluating water availability and ensuring compliance with state and local permits and requirements. The method used to assess this issue was WRI Aqueduct. Entergy participates in discussions with local and regional groups and interacts with local, regional, and state agencies regarding relevant river basin management plans. For example, Entergy is participating in the USBCSD and many other stakeholders on the update of the nutrient study of the Mississippi River. This study is evaluating the nutrient loading of the Mississippi River Basin as the river flows into the State of Louisiana, the additional nutrient loading as it flows through the state, and then the final nutrient levels when the river discharges into the Gulf of Mexico.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, sometimes included	Entergy is engaged and working with stakeholders on resolving potential future conflicts concerning water resources at a basin/catchment level. An example of engagement is Entergy's continued its sponsorship of the US BCSD Water Synergy Project to determine beneficial uses for process water discharges across sectors. Additionally, Entergy is sponsoring development of a water simulation that will allow individuals to experience the trade-offs necessary when decisions are made regarding water usage.
Implications of water on your key commodities/raw materials	Relevant, always included	The method used to assess this issue was internal company knowledge. Entergy produces electricity from steam electric power plants that use large amounts of cooling water, boiler make-up water and house service water needs. The water quantity, quality, biological diversity and ambient temperatures are all factors that are vitally important for Entergy's current and future power plant operations.
Water-related regulatory frameworks	Relevant, always included	The method used to assess this issue was WRI Aqueduct. Entergy's power plants are governed by the Clean Water Act and regulated through state or federal water discharge permits to ensure maintenance of high levels of water quality and to ensure biological diversity of the water withdrawal and discharge receiving body. These factors are affected by ambient conditions such as the quantity, quality, temperature and environmental health of the water body. Other water-stressed areas would be managed similarly. Entergy protects water resources by maintaining a compliance rate with state and federal permit requirements of at least 99 percent from year to year with permit limits related to water discharges and aquatic ecology protection. For example, at the Lewis Creek Plant in Willis, Texas, a water-constrained area, we work with the water conservation district to optimize water use, gaining best practices that can help us use water wisely throughout our operations.
Status of ecosystems and habitats	Relevant, always included	The method used to assess this issue was WRI Aqueduct. Entergy's power plants are governed by the Clean Water Act and regulated through state or federal water discharge permits to ensure maintenance of high levels of water quality and to ensure biological diversity of the water withdrawal and discharge receiving body. These factors are affected by ambient conditions such as the quantity, quality, temperature and environmental health of the water body. Other water-stressed areas would be managed similarly. Entergy protects water resources by maintaining a compliance rate with state and federal permit requirements of at least 99 percent from year to year with permit limits related to water discharges and aquatic ecology protection. For example, at the Lewis Creek Plant in Willis, Texas, a water-constrained area, we work with the water conservation district to optimize water use, gaining best practices that can help us use water wisely throughout our operations.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	The method used to assess this issue was internal company knowledge. All of Entergy's workers are provided with clean water for drinking, cooking and cleaning purposes, adequate facilities for excreta purposes, solid waste management and drainage, and hygiene information and education.
Other contextual issues, please specify	Not considered	Not applicable.

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, sometimes included	Entergy has customers that live in coastal communities. Entergy is engaged with others in encouraging meaningful action to stem the loss of coastal wetlands and barrier island systems recognizing the value these estuaries have on ensuring continued ecosystem services, biological diversity and protection of coastal communities from climate change impacts. This restoration depends upon anticipating and successfully factoring in relative sea level rise over time. Entergy's assessments work primarily with those individuals and customer groups that represent our primary stakeholders' views and offer the experience necessary for valued input. Projects such as The Lowlander Center report and the recent AWF forums have been funded in part by grants provided through Entergy's Environmental Initiatives Fund. Since 2001, the Fund has provided grants totalling approximately \$39 million for projects including those that limit carbon emissions, sequester carbon and restore coastal wetlands and upland habitat.
Employees	Relevant, always included	Entergy employees are the foundation for managing water risks. Entergy formed the Water Peer Group in 2002 where employee subject matter experts meet to discuss water intake, scarcity and quality issues. In 2019, the group focused on water stress mapping, water foot printing and emerging regulatory issues. Entergy employees also participates in various industry groups that monitor both water quantity and quality issues at the national, regional and state levels and benchmark performance.
Investors	Relevant, always included	Communicating to investors that Entergy is effectively managing risk is vitally important. Entergy's Enterprise Risk Management (ERM) process and investment approval process (IAP) are comprehensive Company-wide processes used to analyse business risks. The analysis includes climate change issues and physical risks including those related to water quantity / quality and stakeholder water utilization issues.
Local communities	Relevant, always included	Entergy is actively engaged with state and local planning groups working on the Baton Rouge groundwater and Lewis Creek groundwater issues, regulatory interest groups working on drought/water rights legislation in Texas, and in with water allocation interest groups for the watershed planning in White River and Arkansas River valleys in Arkansas.
NGOs	Relevant, always included	Entergy is working with the state of Louisiana, NGO's and businesses on the Louisiana Freshwater Assessment Project to build a baseline assessment of freshwater resources in our service territory so that we make informed as we make important decisions regarding freshwater water in the future.
Other water users at a basin/catchment level	Relevant, always included	Entergy is working with local business leaders and the US BCSD to achieve tangible water conservation and quality improvements and establish a long-term water collaboration plan in the region by harnessing collective industry capabilities and interests. Business leaders from multiple industries together to identify challenges related to water quality, quantity, and storm water; identify practical solutions; and work together to implement those solutions.
Regulators	Relevant, always included	We engage our regulators at the state and local levels to minimize potential risks from regulatory changes. In Louisiana, we remain active on the Capital Area Groundwater Conservation Commission, which provides regulation of groundwater withdrawals associated with the local aquifer system. Entergy also sits on the development team for the creation of the Louisiana Water Code, which is expected to be the future management tool for groundwater, surface water and its uses based on riparian rights.
River basin management authorities	Relevant, always included	"River basin management authorities are key stakeholders in evaluation of water risk within their jurisdiction and are consulted as appropriate. Entergy also participates in the Louisiana Water Synergy Project. The WSP started in 2012 and brings together industry, non-profits and government agencies to work on water issues important to the state. Projects include a water simulation module, development of a nutrient trading program for the state and coastal zone resiliency. The simulation model evaluates stakeholder water conflicts using a watershed scenario analysis. A computer-based simulation model also has been constructed regarding water usage in the Mississippi River basin.
Statutory special interest groups at a local level	Relevant, always included	Entergy participates in the Louisiana Water Synergy Project, a collaborative effort led by the U.S. Business Council for Sustainable Development. The WSP started in 2012 and brings together industry, non-profits and government agencies to work on water issues important to the state. Projects include a water simulation module, development of a nutrient trading program for the state and coastal zone resiliency. The simulation model evaluates stakeholder water conflicts using a watershed scenario analysis. A computer-based simulation model also has been constructed regarding water usage in the Mississippi River basin. The project employs a front-end user interface to allow participants to make decisions that feed into an overall predictive model, which together form a prototype participatory simulation for the Louisiana Gulf Coast.
Suppliers	Relevant, always included	Entergy is a founding member of EUJSSCA, formed to promote environmental stewardship among utility suppliers and to provide value to customers and shareholders. Its goal is to work with industry suppliers to improve environmental performance and advance sustainable business practices. By working as a group, member companies expect to more effectively and efficiently engage suppliers to improve impacts on air emissions, water consumption, waste disposal and energy-efficiency.
Water utilities at a local level	Relevant, always included	Entergy works with the Lone Star Water Conservation District, a local agency affiliated with Entergy's Lewis Creek Plant, to track and monitor water availability at the local level surrounding our only plant in a water-stressed area.
Other stakeholder, please specify	Not relevant, explanation provided	Entergy does not have 'other' water stakeholders that are not already included in the stakeholder list.

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.

Entergy has a strong risk management culture and has systems in place to track regulatory changes at the national, regional, state, and local level. The regulatory tracking includes potential regulatory changes to water use, restrictions, withdrawal rights, discharge standards or water pricing/tariffs. These systems reside in various groups within the company, including federal regulatory affairs, state regulatory affairs groups, corporate environmental, business function environmental support groups and facility management. This tracking is important in order to identify regulatory risks, potential cost increases, as well as potential operational impacts. Information from this tracking is used to perform scenario planning, cost projections, and to predict operational changes in the future. Scenario and impact analysis is conducted for regulatory changes as needed, and this analysis is presented to environmental and regulatory leadership for information and strategy development. Estimates of potential regulatory changes occur by participating in regulatory efforts as an industry stakeholder and serving on several local allocation planning groups as appropriate. Entergy has integrated regulatory changes on water use issues into its corporate wide risk management process for regulatory issues. Entergy engages with stakeholders on regulatory issues that affect its business performance. For example, from 2015 through 2018, Entergy worked extensively with the Edison Environmental Institute, the Utility Water Act Group, the Cross Cutting Issues Group, and the M.J.B&A Permitting and Infrastructure Coalition to provide input to EPA on cooling water intake structure regulations, effluent limitations guidelines, and the expansion of federal Clean Water Act jurisdiction. Entergy noted increased regulatory scrutiny of compliance with CWA Sections 402 and 404 and increasingly restrictive supporting regulations could result in increases in costs of compliance. It should further be noted that project construction permitting can be threatened by availability of impact mitigation credits to comply with the "no net loss" of wetlands mandate. In 2018, in the Gulf coastal areas, we have continued to experience an increasingly constrained market for hydrologic unit-specific mitigation credits and have considered other alternatives such as permittee responsible mitigation.

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, both in direct operations and the rest of our value chain

W4.1a

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

Entergy views substantive financial change as any water risk issue having the potential to rise to the materiality level requiring SEC disclosure. The measure(s) used in the definition of substantive change are: a) any water risk issue potentially resulting in a compliance violation, permit exceedance, or breach of an agreement, or b) any physical water risk that could interrupt operation of power plants. The threshold used is a change in the metric/measure/indicator which indicates substantive impact on direct operations, supply chain or both. Thresholds vary by indicator. For example, any single permit exceedance would meet the threshold for that indicator. The frequency and process for review: The metrics and thresholds above are reviewed or updated and reported quarterly, first through the Water Peer Group and subject matter experts then again reviewed during the Enterprise Risk Management Process (ERM).

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	1	1-25	The Lewis Creek Power Plant in Willis, Texas, is the only Entergy power plant that operates in a water-constrained area. Even this area is not classified as water-stressed as defined by sustainability analyst RobecoSAM and the DJSI; however, the facility is located in Montgomery County, Texas, in the Lone Star Groundwater Conservation District, an area identified as water-constrained due to a current water use exceeding the local aquifer's sustainable yield by ~20% (25 billion gallons use vs. 21 billion gallons yield). The World Resource's Aqueduct water risk atlas also notes that this area is categorized as medium to high risk based on physical quantity, quality, regulatory and reputational risk categories. Entergy undertook a long-term strategic study of water availability for its Lewis Creek Plant. The study included analysis of the groundwater wells and water plant system. In conjunction with the LSGCD, the facility developed and executed a plan to reduce water withdrawal by 30% through process design changes. By working with the district to optimize water use and leveraging best practices, Lewis Creek was able to exceed its water conservation goal of 30 percent water withdrawal by 2016 – a level also maintained throughout 2019.

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	Mississippi River
--------------------------	-------------------

Number of facilities exposed to water risk

9

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

1-25

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Please select

Comment

Includes 1.) Waterford 1 & 2 2.) River Bend 3.) Little Gypsy 4.) Ninemile Point 5.) Baxter Wilson 6.) Gerald Andrus 7.) Grand Gulf 8.) Waterford 3 9.) Palisades Entergy's regulated electric utility business derives revenue from electric generation, transmission, and distribution on a bundled basis, subject to state and local rate regulation. The state and local regulators do not set rates by function, therefore revenues segregated by function or source of generation are not available for this business. Entergy Wholesale Commodities (EWC) files additional financial information by their respective system operators and state regulating agencies as may be requested from time to time.

Country/Area & River basin

United States of America	Other, please specify (Arkansas River)
--------------------------	----------------------------------------

Number of facilities exposed to water risk

2

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

1-25

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Please select

Comment

Includes 1.) Arkansas Nuclear One and 2.) White Bluff Entergy's regulated electric utility business derives revenue from electric generation, transmission, and distribution on a bundled basis, subject to state and local rate regulation. The state and local regulators do not set rates by function, therefore revenues segregated by function or source of generation are not available for this business. Entergy Wholesale Commodities (EWC) files additional financial information by their respective system operators and state regulating agencies as may be requested from time to time.

Country/Area & River basin

United States of America	Other, please specify (Ouachita River)
--------------------------	-----------------------------------------

Number of facilities exposed to water risk

7

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

1-25

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Please select

Comment

Includes 1.) Rammel Dam 2 2.) Carpenter Dam 3.) Hot Spring 4.) Ouachita 5.) Union Power 6.) Perryville Power Station 7.) Lake Catherine Entergy's regulated electric utility business derives revenue from electric generation, transmission, and distribution on a bundled basis, subject to state and local rate regulation. The state and local regulators do not set rates by function, therefore revenues segregated by function or source of generation are not available for this business. Entergy Wholesale Commodities (EWC) files additional financial information by their respective system operators and state regulating agencies as may be requested from time to time.

Country/Area & River basin

United States of America	Hudson River
--------------------------	--------------

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

1-25

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Please select

Comment

Includes 1.) Indian Point Entergy's regulated electric utility business derives revenue from electric generation, transmission, and distribution on a bundled basis, subject to state and local rate regulation. The state and local regulators do not set rates by function, therefore revenues segregated by function or source of generation are not available for this business. Entergy Wholesale Commodities (EWC) files additional financial information by their respective system operators and state regulating agencies as may be requested from time to time.

Country/Area & River basin

United States of America	Other, please specify (San Jacinto River (Lewis Creek Reservoir))
--------------------------	--------------------------------------------------------------------

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

1-25

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Please select

Comment

Includes 1.) Lewis Creek Entergy's regulated electric utility business derives revenue from electric generation, transmission, and distribution on a bundled basis, subject to state and local rate regulation. The state and local regulators do not set rates by function, therefore revenues segregated by function or source of generation are not available for this business. Entergy Wholesale Commodities (EWC) files additional financial information by their respective system operators and state regulating agencies as may be requested from time to time.

Country/Area & River basin

United States of America	Other, please specify (White River)
--------------------------	-------------------------------------

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

1-25

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Please select

Comment

Includes 1.) Independence Entergy's regulated electric utility business derives revenue from electric generation, transmission, and distribution on a bundled basis, subject to state and local rate regulation. The state and local regulators do not set rates by function, therefore revenues segregated by function or source of generation are not available for this business. Entergy Wholesale Commodities (EWC) files additional financial information by their respective system operators and state regulating agencies as may be requested from time to time.

Country/Area & River basin

United States of America	Sabine River
--------------------------	--------------

Number of facilities exposed to water risk

2

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

1-25

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Please select

Comment

Includes 1.) Nelson and 2.) Sabine Entergy's regulated electric utility business derives revenue from electric generation, transmission, and distribution on a bundled basis, subject to state and local rate regulation. The state and local regulators do not set rates by function, therefore revenues segregated by function or source of generation are not available for this business. Entergy Wholesale Commodities (EWC) files additional financial information by their respective system operators and state regulating agencies as may be requested from time to time.

Country/Area & River basin

United States of America	Pearl River
--------------------------	-------------

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

1-25

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Please select

Comment

Includes 1.) Rex Brown Entergy's regulated electric utility business derives revenue from electric generation, transmission, and distribution on a bundled basis, subject to state and local rate regulation. The state and local regulators do not set rates by function, therefore revenues segregated by function or source of generation are not available for this business. Entergy Wholesale Commodities (EWC) files additional financial information by their respective system operators and state regulating agencies as may be requested from time to time.

Country/Area & River basin

United States of America	Other, please specify (Big Black River)
--------------------------	-----------------------------------------

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

1-25

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Please select

Comment

Includes 1.) Attala Entergy's regulated electric utility business derives revenue from electric generation, transmission, and distribution on a bundled basis, subject to state and local rate regulation. The state and local regulators do not set rates by function, therefore revenues segregated by function or source of generation are not available for this business. Entergy Wholesale Commodities (EWC) files additional financial information by their respective system operators and state regulating agencies as may be requested from time to time.

Country/Area & River basin

United States of America	Other, please specify (Atlantic Ocean)
--------------------------	----------------------------------------

Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

1-25

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

Please select

Comment

Includes 1.) Pilgrim Entergy's regulated electric utility business derives revenue from electric generation, transmission, and distribution on a bundled basis, subject to state and local rate regulation. The state and local regulators do not set rates by function, therefore revenues segregated by function or source of generation are not available for this business. Entergy Wholesale Commodities (EWC) files additional financial information by their respective system operators and state regulating agencies as may be requested from time to time.

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 (San Jacinto River (Lewis Creek Reservoir)
--------------------------	-------------------------------------------------------------------

Type of risk & Primary risk driver

Physical	Flooding
----------	----------

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

During periods of river flood stage, the electric generation from the plant may need to be reduced.

Timeframe

1-3 years

Magnitude of potential impact

Low

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Primary response to risk

Other, please specify (Water Conservation)

Description of response

Entergy undertook a long-term strategic study of water availability for its Lewis Creek Plant. The study included analysis of the groundwater wells and water plant system at Lewis Creek, and the facility developed and executed a plan to reduce water withdrawal by 30% through process design changes. By working with the district to optimize water use and leveraging best practices, Lewis Creek was able to exceed its water conservation goal of 30 percent water withdrawal by 2016 – a level also maintained throughout 2019.

Cost of response

Explanation of cost of response

Country/Area & River basin

United States of America	Mississippi River
--------------------------	-------------------

Type of risk & Primary risk driver

Physical	Flooding
----------	----------

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

River flooding which curtails operations at the power plants.

Timeframe

Unknown

Magnitude of potential impact

Low

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Primary response to risk

Other, please specify (Shift energy production)

Description of response

Shift energy production to other reserve units until river levels subside.

Cost of response

Explanation of cost of response

Financial investment will depend on the specific project, unable to estimate at this time. Implementation costs vary considerably based on level of process change option selected.

Country/Area & River basin

United States of America	Hudson River
--------------------------	--------------

Type of risk & Primary risk driver

Physical	Flooding
----------	----------

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

River flooding which curtails operations at the power plants.

Timeframe

Unknown

Magnitude of potential impact

High

Likelihood

Unlikely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Financial investment will depend on the specific project, unable to estimate at this time. Implementation costs vary considerably based on level of process change option selected.

Primary response to risk

Other, please specify (Risk Analysis)

Description of response

Entergy conducted a flood event re-evaluation for Indian Point Energy Center evaluating the potential impacts from various scenarios of worst case flood hazards to ensure the design basis flood protection was able to withstand flood hazards from these scenarios.

Cost of response

Explanation of cost of response

Financial investment will depend on the specific project, unable to estimate at this time. Implementation costs vary considerably based on level of process change option selected.

Country/Area & River basin

United States of America	Mississippi River
--------------------------	-------------------

Type of risk & Primary risk driver

Regulatory	Regulatory uncertainty
------------	------------------------

Primary potential impact

Other, please specify (Delays in permitting)

Company-specific description

Entergy's ability to operate is contingent upon the receipt of relevant regulatory permits and permissions. This ability may be compromised if the relevant regulatory agencies do not issue needed permits.

Timeframe

Unknown

Magnitude of potential impact

Unknown

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Primary response to risk

Engage with regulators/policymakers

Description of response

Entergy keeps abreast of the applicable federal, state and local regulatory changes that may affect its operating facilities. Entergy interacts with regulators/policymakers for additional guidance when required.

Cost of response

Explanation of cost of response

Financial investment will depend on the specific project, unable to estimate at this time. Implementation costs vary considerably based on level of process change option selected.

Country/Area & River basin

United States of America	Mississippi River
--------------------------	-------------------

Type of risk & Primary risk driver

Reputation & markets	Community opposition
----------------------	----------------------

Primary potential impact

Other, please specify (Requirement for remediation)

Company-specific description

Entergy's ability to operate is contingent upon the receipt of relevant regulatory permits and permissions. This ability may be compromised if the relevant regulatory agencies and stakeholders do not have confidence in the company's ability to comply with environmental requirements.

Timeframe

1-3 years

Magnitude of potential impact

High

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Primary response to risk

Comply with local regulatory requirements

Description of response

The NRC requires nuclear power plants to regularly monitor and report the presence of radioactive material in the environment. Entergy joined other nuclear utilities and the Nuclear Energy Institute in 2006 to develop a voluntary groundwater monitoring and protection program. This initiative began after detection of very low levels of radioactive material, primarily tritium, in groundwater at several plants in the United States. Tritium is a radioactive form of hydrogen that occurs naturally and is also a by-product of nuclear plant operations. In addition to tritium, other radionuclides have been found in on site ground water at nuclear plants. As part of the groundwater monitoring and protection program, Entergy has: (1) performed reviews of plant groundwater characteristics (hydrology) and historical records of past events on site that may have potentially impacted groundwater; (2) implemented fleet procedures on how to handle events that could impact groundwater; and (3) installed groundwater monitoring wells and began periodic sampling. The program also includes protocols for notifying local officials if contamination is found.

Cost of response

Explanation of cost of response

Financial investment will depend on the specific project, unable to estimate at this time. Implementation costs vary considerably based on level of process change option selected.

Country/Area & River basin

United States of America	Hudson River
--------------------------	--------------

Type of risk & Primary risk driver

Reputation & markets	Community opposition
----------------------	----------------------

Primary potential impact

Other, please specify (Requirement for remediation)

Company-specific description

Entergy's ability to operate is contingent upon the receipt of relevant regulatory permits and permissions. This ability may be compromised if the relevant regulatory agencies and stakeholders do not have confidence in the company's ability to comply with environmental requirements. This ability may be compromised if the relevant regulatory agencies and stakeholders do not have confidence in the company's ability to comply with environmental requirements.

Timeframe

1-3 years

Magnitude of potential impact

High

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact**Primary response to risk**

Other, please specify (Comply with local legal requirements or company own internal standards, whichever is more stringent.)

Description of response

The NRC requires nuclear power plants to regularly monitor and report the presence of radioactive material in the environment. Entergy joined other nuclear utilities and the Nuclear Energy Institute in 2006 to develop a voluntary groundwater monitoring and protection program. This initiative began after detection of very low levels of radioactive material, primarily tritium, in groundwater at several plants in the United States. Tritium is a radioactive form of hydrogen that occurs naturally and is also a by-product of nuclear plant operations. In addition to tritium, other radionuclides have been found in on site ground water at nuclear plants. As part of the groundwater monitoring and protection program, Entergy has: (1) performed reviews of plant groundwater characteristics (hydrology) and historical records of past events on site that may have potentially impacted groundwater; (2) implemented fleet procedures on how to handle events that could impact groundwater; and (3) installed groundwater monitoring wells and began periodic sampling. The program also includes protocols for notifying local officials if contamination is found.

Cost of response**Explanation of cost of response**

Financial investment will depend on the specific project, unable to estimate at this time. Implementation costs vary considerably based on level of process change option selected.

Country/Area & River basin

United States of America	Other, please specify (Arkansas River)
--------------------------	-----------------------------------------

Type of risk & Primary risk driver

Physical	Flooding
----------	----------

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

River flooding which curtails operations at the power plants.

Timeframe

Unknown

Magnitude of potential impact

Unknown

Likelihood

Unlikely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Primary response to risk

Other, please specify (Shift energy production)

Description of response

Shift energy production to other reserve units until water levels subside.

Cost of response

Explanation of cost of response

Financial investment will depend on the specific project, unable to estimate at this time. Implementation costs vary considerably based on level of process change option selected.

Country/Area & River basin

United States of America	Other, please specify (Ouachita River)
--------------------------	-----------------------------------------

Type of risk & Primary risk driver

Physical	Flooding
----------	----------

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

River flooding which curtails operations at the power plants.

Timeframe

Unknown

Magnitude of potential impact

Medium

Likelihood

Unlikely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Primary response to risk

Other, please specify (Shift energy production)

Description of response

Shift energy production to other reserve units until water levels subside.

Cost of response

Explanation of cost of response

Financial investment will depend on the specific project, unable to estimate at this time. Implementation costs vary considerably based on level of process change option selected.

Country/Area & River basin

United States of America	Other, please specify (White River)
--------------------------	-------------------------------------

Type of risk & Primary risk driver

Physical	Flooding
----------	----------

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

River flooding curtailing operations at the power plant.

Timeframe

Unknown

Magnitude of potential impact

Unknown

Likelihood

Unknown

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Primary response to risk

Other, please specify (Shift energy production)

Description of response

Shift energy production to other reserve units until water levels subside.

Cost of response

Explanation of cost of response

Financial investment will depend on the specific project, unable to estimate at this time. Implementation costs vary considerably based on level of process change option selected.

Country/Area & River basin

United States of America	Sabine River
--------------------------	--------------

Type of risk & Primary risk driver

Physical	Flooding
----------	----------

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

River flooding curtailing operations at the power plant.

Timeframe

Unknown

Magnitude of potential impact

Unknown

Likelihood

Unknown

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Primary response to risk

Other, please specify (Shift energy production)

Description of response

Shift energy production to other reserve units until water levels subside.

Cost of response

Explanation of cost of response

Financial investment will depend on the specific project, unable to estimate at this time. Implementation costs vary considerably based on level of process change option selected.

Country/Area & River basin

United States of America	Pearl River
--------------------------	-------------

Type of risk & Primary risk driver

Physical	Flooding
----------	----------

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

River flooding curtailing operations at the power plant.

Timeframe

Unknown

Magnitude of potential impact

Unknown

Likelihood

Unknown

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Primary response to risk

Other, please specify (Shift energy production)

Description of response

Shift energy production to other reserve units until water levels subside.

Cost of response

Explanation of cost of response

Financial investment will depend on the specific project, unable to estimate at this time. Implementation costs vary considerably based on level of process change option selected.

Country/Area & River basin

United States of America	Other, please specify (Big Black River)
--------------------------	-----------------------------------------

Type of risk & Primary risk driver

Physical	Flooding
----------	----------

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

River flooding curtailing operations at the power plant.

Timeframe

Unknown

Magnitude of potential impact

Unknown

Likelihood

Unknown

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Primary response to risk

Other, please specify (Shift energy production)

Description of response

Shift energy production to other reserve units until water levels subside.

Cost of response

Explanation of cost of response

Financial investment will depend on the specific project, unable to estimate at this time. Implementation costs vary considerably based on level of process change option selected.

W4.2a

(W4.2a) Provide details of risks identified within your value chain (beyond 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 (Arkansas River)
--------------------------	----------------------------------------

Stage of value chain

Supply chain

Type of risk & Primary risk driver

Physical	Flooding
----------	----------

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Entergy's fossil generation facilities are at risk for obtaining fuel supplies during severe weather events. Examples of such occurrences are flooding in the Midwest to the extent the rail shipments of coal were curtailed and during hurricane event when natural gas supplies were curtailed.

Timeframe

Unknown

Magnitude of potential impact

Medium-low

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Primary response to risk

Direct operations	Other, please specify (Alternate sources of fuel are identified and acquired to maintain generation activities at the sites.)
-------------------	--------------------------------------------------------------------------------------------------------------------------------

Description of response

Alternate sources of fuel are identified and acquired to maintain generation activities at the sites. Most of Entergy's gas units can also burn fuel oil, which is stored onsite to minimize impacts from temporary supply interruptions. Reserves are maintained to provide an alternative source of fuel. At coal facilities, coal inventory is stockpiled.

Cost of response

Explanation of cost of response

Financial investment will depend on the specific project, unable to estimate at this time. Implementation costs vary considerably based on level of process change option selected.

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

Resilience

Primary water-related opportunity

Increased resilience to impacts of climate change

Company-specific description & strategy to realize opportunity

Over the past several years, Entergy has participated in the Department of Energy's Partnership for Energy Sector Climate Resilience. As described by the department, this initiative intends to enhance U.S. energy security by improving the resilience of energy infrastructure to extreme weather and climate change impacts. The goal is to accelerate investment in technologies, practices and policies that will enable a resilient 21st-century energy system and to facilitate risk-based decision making and cost-effective strategies for a more climate-resilient U.S. energy infrastructure. Entergy also deploys storm guys on critical distribution structures in open marsh areas along the coast. Storm guys are tensioned cables designed to add stability to our structures. On distribution circuits close to the Gulf Coast, we only use class three (or larger) poles for trunk feeder construction. Class three poles are rated to withstand 3,000 lbs. of horizontal load. Entergy continually prepares for storms and flooding and limits the potential damages they can inflict on our systems by: o Completing at least one cycle of transmission aerial inspections prior to June of each year. o Continuing to identify distribution circuits with operational challenges and devices which tend to cause reliability issues and take appropriate steps to improve the performance of these facilities. o Identifying and removing dangerous trees outside of rights-of-way to prevent them from falling into our lines. o Purchasing portable batteries and mobile substation equipment for quick restoration of power when our substations are compromised by storms. o Upgrading communications systems to enhance our ability to limit the impact of outages through improved protection and controls.

Estimated timeframe for realization

More than 6 years

Magnitude of potential financial impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

Type of opportunity

Resilience

Primary water-related opportunity

Increased resilience to impacts of climate change

Company-specific description & strategy to realize opportunity

Entergy is investing over \$11 billion in capital over the next three years in generation assets and transmission and distribution infrastructure. Initiated in 2002, Entergy's portfolio transformation strategy incorporates cleaner, more efficient generation sources, allowing for the retirement of older, less efficient legacy units. This proposed fleet modernization will drastically reduce Entergy's water usage, as these newer plants will use significantly less water than our legacy units.

Estimated timeframe for realization

More than 6 years

Magnitude of potential financial impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

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)

River Bend Station

Country/Area & River basin

United States of America	Mississippi River
--------------------------	-------------------

Latitude

30.759557

Longitude

-91.330083

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

23225.41

Comparison of total withdrawals with previous reporting year

Lower

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

23225.41

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)

4967.67

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

4967.67

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)

18257.74

Comparison of total consumption with previous reporting year

Lower

Please explain

Last year, water consumption at the River Bend Station was 3.49% higher.

Facility reference number

Facility 2

Facility name (optional)

Grand Gulf Nuclear Station

Country/Area & River basin

United States of America	Mississippi River
--------------------------	-------------------

Latitude

32.009462

Longitude

-91.047001

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

46363.27

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

0

Withdrawals from groundwater - renewable

46363.27

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)

9342.04

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

9342.04

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

37021.23

Comparison of total consumption with previous reporting year

Lower

Please explain

Last year, water consumption at the Grand Gulf Nuclear Station was 85.50% percent higher.

Facility reference number

Facility 3

Facility name (optional)

Waterford 3 Nuclear Generating Station

Country/Area & River basin

United States of America	Mississippi River
--------------------------	-------------------

Latitude

29.996843

Longitude

-90.471402

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

1451481.4

Comparison of total withdrawals with previous reporting year

About the same

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

1451481.4

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)

1451481.4

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

1451481.4

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

Entergy had the same water consumption value in 2018 for this facility.

Facility reference number

Facility 4

Facility name (optional)

Arkansas Nuclear One

Country/Area & River basin

United States of America	Other, please specify (Arkansas River)
--------------------------	-----------------------------------------

Latitude

35.310705

Longitude

-93.23088

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

1264717.98

Comparison of total withdrawals with previous reporting year

Lower

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

1264717.98

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)

1246380.6

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

1246380.6

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)

18337.37

Comparison of total consumption with previous reporting year

Higher

Please explain

Last year, water consumption at the Arkansas Nuclear One was 3.10% lower.

Facility reference number

Facility 5

Facility name (optional)

Indian Point Energy Center

Country/Area & River basin

United States of America	Hudson River
--------------------------	--------------

Latitude

41.270801

Longitude

-73.953142

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

3036535.27

Comparison of total withdrawals with previous reporting year

Lower

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

0

Withdrawals from brackish surface water/seawater

3036535.27

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)

3036535.27

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

3036535.27

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

Entergy had the same water consumption value in 2018 for this facility.

Facility reference number

Facility 6

Facility name (optional)

Lewis Creek Power Plant

Country/Area & River basin

United States of America	Other, please specify (Other: San Jacinto River (Lewis Creek Reservoir))
--------------------------	---------------------------------------------------------------------------

Latitude

30.436961

Longitude

-95.520726

Located in area with water stress

Yes

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

494206.1

Comparison of total withdrawals with previous reporting year

Lower

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

494206.1

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)

494206.1

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

494206.1

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

Entergy had the same water consumption value in 2018 for this facility.

Facility reference number

Facility 7

Facility name (optional)

Rommel Dam 2

Country/Area & River basin

United States of America	Other, please specify (Ouachita River)
--------------------------	-----------------------------------------

Latitude

34.428556

Longitude

-92.892028

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Hydropower

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

0

Comparison of total withdrawals with previous reporting year

About the same

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

0

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)

0

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0

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

Entergy had the same water consumption value in 2018 for this facility.

Facility reference number

Facility 8

Facility name (optional)

Carpenter Dam

Country/Area & River basin

United States of America	Other, please specify (Ouachita River)
--------------------------	----------------------------------------

Latitude

34.444333

Longitude

-93.023472

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Hydropower

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

0

Comparison of total withdrawals with previous reporting year

About the same

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

0

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)

0

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

0

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

Entergy had the same water consumption value in 2018 for this facility.

Facility reference number

Facility 9

Facility name (optional)

White Bluff Power Plant

Country/Area & River basin

United States of America	Other, please specify (Arkansas River)
--------------------------	-----------------------------------------

Latitude

34.4236

Longitude

-92.1392

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Coal - hard

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

18671.27

Comparison of total withdrawals with previous reporting year

Lower

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

18671.27

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)

2498.8

Comparison of total discharges with previous reporting year

Much lower

Discharges to fresh surface water

2498.8

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)

16172.47

Comparison of total consumption with previous reporting year

Lower

Please explain

Last year, water consumption at the White Bluff Power Plant was 10.40% percent higher.

Facility reference number

Facility 10

Facility name (optional)

Independence Power Plant

Country/Area & River basin

United States of America	Other, please specify (White River)
--------------------------	-------------------------------------

Latitude

35.6733

Longitude

-91.4083

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Coal - hard

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

16284.84

Comparison of total withdrawals with previous reporting year

Lower

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

16284.84

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)

5193.21

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

5193.21

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)

11091.64

Comparison of total consumption with previous reporting year

Lower

Please explain

Last year, water consumption at the Independence Power Plant was 56.40% percent higher.

Facility reference number

Facility 11

Facility name (optional)

Hot Spring Energy Facility

Country/Area & River basin

United States of America	Other, please specify (Ouachita River)
--------------------------	----------------------------------------

Latitude

34.2963

Longitude

-92.8683

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

3342.52

Comparison of total withdrawals with previous reporting year

Higher

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

3342.52

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)

238.71

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

238.71

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)

3103.81

Comparison of total consumption with previous reporting year

Lower

Please explain

Last year, water consumption at the Hot Spring Energy Facility was 7.02% percent higher.

Facility reference number

Facility 12

Facility name (optional)

Ouachita Gas Power Plant

Country/Area & River basin

United States of America	Other, please specify (Ouachita River)
--------------------------	----------------------------------------

Latitude

32.7056

Longitude

-92.0697

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

11.87

Comparison of total withdrawals with previous reporting year

Lower

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

11.87

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)

2.29

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

2.29

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)

9.58

Comparison of total consumption with previous reporting year

Lower

Please explain

Last year, water consumption at the Ouachita Gas Power Plant was 23.69% percent higher.

Facility reference number

Facility 13

Facility name (optional)

Union Power Station

Country/Area & River basin

United States of America	Other, please specify (Ouachita River)
--------------------------	----------------------------------------

Latitude

33.2961

Longitude

-92.5933

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

10443.42

Comparison of total withdrawals with previous reporting year

Higher

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

10443.42

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)

1164.7

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

1164.7

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)

9278.72

Comparison of total consumption with previous reporting year

Higher

Please explain

Last year, water consumption at the Union Power Station was 5.24% lower.

Facility reference number

Facility 14

Facility name (optional)

Perryville Power Station

Country/Area & River basin

United States of America	Other, please specify (Ouachita River)
--------------------------	----------------------------------------

Latitude

32.6914

Longitude

-92.0192

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

11.87

Comparison of total withdrawals with previous reporting year

Lower

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

11.87

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)

9.98

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

9.98

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)

1.89

Comparison of total consumption with previous reporting year

Lower

Please explain

Last year, water consumption at the Perryville Power Station was 98.19% percent higher.

Facility reference number

Facility 15

Facility name (optional)

Lake Catherine Power Station

Country/Area & River basin

United States of America	Other, please specify (Ouachita River)
--------------------------	----------------------------------------

Latitude

34.4341

Longitude

-92.9046

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

208008.38

Comparison of total withdrawals with previous reporting year

Lower

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

208008.38

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)

208008.38

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

208008.38

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

Entergy had the same water consumption value in 2018 for this Facility.

Facility reference number

Facility 16

Facility name (optional)

Waterford 1 & 2 Gas Power Plant

Country/Area & River basin

United States of America	Mississippi River
--------------------------	-------------------

Latitude

29.9994

Longitude

-90.4758

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

522039.17

Comparison of total withdrawals with previous reporting year

Lower

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

522039.17

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)

522039.17

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

522039.17

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

Entergy had the same water consumption value in 2018 for this Facility.

Facility reference number

Facility 17

Facility name (optional)

Little Gypsy Power Plant

Country/Area & River basin

United States of America	Mississippi River
--------------------------	-------------------

Latitude

30.0033

Longitude

-90.4611

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

602743.55

Comparison of total withdrawals with previous reporting year

Lower

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

602743.55

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)

579623.88

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

579623.88

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)

23119.67

Comparison of total consumption with previous reporting year

Much higher

Please explain

The Little Gypsy Power Plant did not consume any water in 2018.

Facility reference number

Facility 18

Facility name (optional)

Ninemile Point Steam Electric Station

Country/Area & River basin

United States of America	Mississippi River
--------------------------	-------------------

Latitude

29.9472

Longitude

-90.1458

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

1229772.81

Comparison of total withdrawals with previous reporting year

Higher

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

1229772.81

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)

1229772.81

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

1229772.81

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

Entergy had the same water consumption value in 2018 for this Facility.

Facility reference number

Facility 19

Facility name (optional)

Baxter Wilson Power Plant

Country/Area & River basin

United States of America	Mississippi River
--------------------------	-------------------

Latitude

32.2831

Longitude

-90.9306

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

259291.6

Comparison of total withdrawals with previous reporting year

Lower

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

259291.6

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)

259291.6

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

259291.6

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

Entergy had the same water consumption value in 2018 for this Facility.

Facility reference number

Facility 20

Facility name (optional)

Gerald Andrus Gas Power Plant

Country/Area & River basin

United States of America	Mississippi River
--------------------------	-------------------

Latitude

33.3503

Longitude

91.1181

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

138816.51

Comparison of total withdrawals with previous reporting year

Lower

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

138816.51

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)

138816.51

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

138816.51

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

Entergy had the same water consumption value in 2018 for this Facility.

Facility reference number

Facility 21

Facility name (optional)

Nelson Power Plant

Country/Area & River basin

United States of America	Sabine River
--------------------------	--------------

Latitude

30.2861

Longitude

-93.2917

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Coal - hard

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

9854.96

Comparison of total withdrawals with previous reporting year

Lower

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

9854.96

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)

9.87

Comparison of total discharges with previous reporting year

Much lower

Discharges to fresh surface water

9.87

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)

9845.09

Comparison of total consumption with previous reporting year

Much higher

Please explain

Last year, water consumption at the Nelson Power Plant was 343.11% lower.

Facility reference number

Facility 22

Facility name (optional)

Sabine Gas Power Plant

Country/Area & River basin

United States of America	Sabine River
--------------------------	--------------

Latitude

30.0242

Longitude

-93.875

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

1429385.08

Comparison of total withdrawals with previous reporting year

Lower

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

0

Withdrawals from brackish surface water/seawater

1429385.08

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)

1426702.66

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

1426702.66

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

2682.43

Comparison of total consumption with previous reporting year

Higher

Please explain

The Sabine Gas Power Plant did not consume any water in 2018.

Facility reference number

Facility 23

Facility name (optional)

Rex Brown Gas Power Plant

Country/Area & River basin

United States of America	Pearl River
--------------------------	-------------

Latitude

32.3564

Longitude

-90.2125

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

21394.9

Comparison of total withdrawals with previous reporting year

Lower

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

21394.9

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)

21394.9

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

21394.9

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

Energy had the same water consumption value in 2018 for this Facility.

Facility reference number

Facility 24

Facility name (optional)

Attala Energy Facility

Country/Area & River basin

United States of America	Other, please specify (Big Black River)
--------------------------	-----------------------------------------

Latitude

33.0142

Longitude

-89.6758

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

2059.08

Comparison of total withdrawals with previous reporting year

Lower

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

2059.08

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)

516.47

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

516.47

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)

1542.61

Comparison of total consumption with previous reporting year

Lower

Please explain

Last year, water consumption at the Attala Energy Facility was 22.99% percent higher.

Facility reference number

Facility 25

Facility name (optional)

Palisades Power Plant

Country/Area & River basin

United States of America	Mississippi River
--------------------------	-------------------

Latitude

42.324567

Longitude

-86.314595

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

181500.88

Comparison of total withdrawals with previous reporting year

Higher

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

181500.88

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)

157821.77

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

157821.77

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)

23679.11

Comparison of total consumption with previous reporting year

Higher

Please explain

Last year, water consumption at the Palisades Power Plant was 25.69% lower.

Facility reference number

Facility 26

Facility name (optional)

Pilgrim Nuclear Power Station

Country/Area & River basin

United States of America	Other, please specify (Atlantic Ocean)
--------------------------	----------------------------------------

Latitude

41.943577

Longitude

-70.579608

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

180177.43

Comparison of total withdrawals with previous reporting year

Much lower

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

0

Withdrawals from brackish surface water/seawater

180177.43

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)

180177.43

Comparison of total discharges with previous reporting year

Much lower

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

180177.43

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

Entergy had the same water consumption value in 2018 for this Facility. In 2019, Pilgrim Nuclear Power Station was permanently shut down, resulting in less water withdrawal and discharge than previous years. For additional information, please see here: <https://www.energynewsroom.com/news/pilgrim-nuclear-power-station-shut-down-permanently/>

Facility reference number

Please select

Facility name (optional)

Country/Area & River basin

Please select

Latitude

Longitude

Located in area with water stress

Please select

Primary power generation source for your electricity generation at this facility

Please select

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

Comparison of total withdrawals with previous reporting year

Please select

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

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

Total water discharges at this facility (megaliters/year)

Comparison of total discharges with previous reporting year

Please select

Discharges to fresh surface water

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

Total water consumption at this facility (megaliters/year)

Comparison of total consumption with previous reporting year

Please select

Please explain

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?
Typically pump curves and run times are used to quantify this.

Water withdrawals – volume by source

% verified
76-100

What standard and methodology was used?
Typically pump curves and run times are used to quantify this.

Water withdrawals – quality

% verified
Please select

What standard and methodology was used?
<Not Applicable>

Water discharges – total volumes

% verified
76-100

What standard and methodology was used?
Standards and methodology as contained in Federal and State NPDES Permit.

Water discharges – volume by destination

% verified
76-100

What standard and methodology was used?
Standards and methodology as contained in Federal and State NPDES Permit.

Water discharges – volume by treatment method

% verified
76-100

What standard and methodology was used?
Standards and methodology as contained in Federal and State NPDES Permit.

Water discharge quality – quality by standard effluent parameters

% verified
76-100

What standard and methodology was used?
Standards and methodology as contained in Federal and State NPDES Permit.

Water discharge quality – temperature

% verified
76-100

What standard and methodology was used?
Standards and methodology as contained in Federal and State NPDES Permit.

Water consumption – total volume

% verified
Please select

What standard and methodology was used?
<Not Applicable>

Water recycled/reused

% verified
Please select

What standard and methodology was used?
<Not Applicable>

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 water-related performance standards for direct operations Description of water-related standards for procurement Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace Commitment to safely managed Water, Sanitation and Hygiene (WASH) in local communities Recognition of environmental linkages, for example, due to climate change	Entergy's Environmental Management Policy, Environmental Management System Procedure (EMS), and Water Management Standard apply to all operations of the company. The purpose of this document is to provide clear direction to all employees regarding both the processes and expectations for ensuring water management excellence. The policy, procedures and standard also ensure consistency across the Entergy system. Entergy's environmental vision and environmental policy and management system are publicly available on the company's website. http://www.entergy.com/environment/ . Entergy requires employees, agents and contractors to comply with applicable environmental laws and regulations. Entergy's EHS policy states that the company pledges to: Engage key stakeholders to anticipate emerging environmental issues, respond to legitimate concerns, and advocate development of sound corporate policy. All of Entergy's workers are provided with clean water for drinking, cooking and cleaning purposes; adequate facilities for excreta purposes, solid waste management and drainage are provided and monitored by public water systems provider. For those facilities that have private water systems, we have groundwater or surface water withdrawal limits that are monitored and maintained with strict compliance.

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
Chief Executive Officer (CEO)	Entergy's CEO has the overarching responsibility for managing risk including water management risk, executing strategy that positions the company to prosper in a constrained economy and ensuring actions are taken to meet Entergy's environmental strategy. Additionally, The CEO chairs the Board of Directors and oversees Entergy's entire corporate structure, governance and management.
Other, please specify (Audit Committee of the Board of Directors)	Entergy's Audit Committee of the Board of Directors has the responsibility for oversight and implementation of Entergy's position, performance and advocacy associated with any material water issues.
Other, please specify (Executive Vice President)	Entergy's Executive Vice President has the responsibility for oversight and implementation of Entergy's position, performance and advocacy associated with any material water issues. Additionally, the Vice President has the responsibility of approving Entergy EMS Procedures and revisions as well as interpreting Entergy EMS Procedures, as needed.
Other, please specify (Chief Administrative Officer)	Entergy's Chief Administrative Officer has the responsibility for oversight and implementation of Entergy's position, performance and advocacy associated with any material water issues.
Other, please specify (Vice President, Environmental Strategy & Policy)	Entergy's Vice President of Environmental Strategy & Policy has the responsibility for oversight and implementation of Entergy's position, performance and advocacy associated with any material water issues.
Other, please specify (Chairman)	Entergy's Chairman has the overarching responsibility for managing risk including water management risk, executing strategy that positions the company to prosper in a constrained economy and ensuring actions are taken to meet Entergy's environmental strategy.
Director on board	The Board of Directors in 2002 adopted Entergy's Environmental Vision Statement which details the company's commitment to operate its business in ways that preserve and protect our environment.

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	<ul style="list-style-type: none"> Monitoring implementation and performance Overseeing major capital expenditures 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 Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives 	Senior Management reviews water issues quarterly at Environmental Leadership Team meetings. Briefings on water issues are conducted on a quarterly basis. Material water issues are typically reported quarterly and contained in Entergy's 10K. However, issues that are more immediate or of a material nature may be reported more frequently.

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

Quarterly

Please explain

Entergy's CEO has the overarching responsibility for managing risk including water management risk, executing strategy that positions the company to prosper in a constrained economy and ensuring actions are taken to meet Entergy's environmental strategy. Additionally, the CEO chairs the Board of Directors and oversees Entergy's entire corporate structure, governance and management.

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

Other, please specify (Audit Committee of the Board of Directors)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

Entergy's Audit Committee of the Board of Directors has the responsibility for oversight and implementation of Entergy's position, performance and advocacy associated with any material water issues.

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

Other, please specify (Executive Vice President)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

Entergy's Executive Vice President has the responsibility for oversight and implementation of Entergy's position, performance and advocacy associated with any material water issues. Additionally, the Vice President has the responsibility of approving Entergy EMS Procedures and revisions as well as interpreting Entergy EMS Procedures, as needed.

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

Other, please specify (Chief Administrative Officer)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

Entergy's Chief Administrative Officer has the responsibility for oversight and implementation of Entergy's position, performance and advocacy associated with any material water issues.

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

Other, please specify (Vice President, Environmental Strategy & Policy)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

Entergy's Vice President of Environmental Strategy & Policy has the responsibility for oversight and implementation of Entergy's position, performance and advocacy associated with any material water issues.

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

Other, please specify (Chairman)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

Entergy's Chairman has the overarching responsibility for managing risk including water management risk, executing strategy that positions the company to prosper in a constrained economy and ensuring actions are taken to meet Entergy's environmental strategy.

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	Climate and environmental risk management protects Entergy's physical assets, financial performance and total shareholder return. Entergy's compensation programs for executive officers are based on a philosophy of pay-for-performance which is embodied in the design of our annual and long-term incentive plans. Our annual and long-term incentive compensation awards reward the achievement of shareholder value using metrics that are deemed by the Board to be consistent with the overall goals and strategic direction that the Board has set for the company. Achievement of the Company's sustainability objectives influences long-term shareholder value and correspondingly the equity awarded each year under the long-term incentive programs. Within the applicable business units, individual awards under our annual incentive plan are directly tied to a variety of sustainability business objectives, including performance under the company's climate commitment and goals.

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 Chief Executive Officer (CEO)	Other, please specify (Entergy is not currently independently incentivizing water-related issues using performance indicators. Entergy does provide incentives for effectively managing environmental risks, in which water-related issues are encompassed.)	Our annual and long-term incentive compensation elements incentivize and reward the achievement of business objectives. Entergy believes that effectively managing environmental risks is vital for creating sustainable shareholder value. Continuous ESG stakeholder engagement and mitigation of climate risks (including water risks) helps achieve performance results while enhancing our ability to maintain low rates and deliver clean, reliable power. These are not direct and separate compensation incentives. ESG is integrated into our compensation system as a critical component of total shareholder return and overall corporate governance and risk management. Entergy is not currently independently incentivizing water-related issues using performance indicators. In 2020, Entergy is piloting a comprehensive performance dashboard that will assess water-related issues using performance indicators. The dashboard will be focused on creating value for the company's four key stakeholders. Depending on the outcome of the 2020 pilot, this process may be adopted as a permanent part of the company's method for calculating annual financial incentives for all employees.
Non-monetary reward	Other, please specify (All Employees)	Reduction of water withdrawals Reduction in consumption volumes Improvements in efficiency - direct operations Improvements in efficiency - supply chain Improvements in waste water quality - direct operations Implementation of employee awareness campaign or training program Increased access to workplace WASH Implementation of water-related community project	Entergy recognizes employees for participation in water-related activities, including water advocacy, communicating water-related issues, and involvement in water-related volunteerism.

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

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?

Entergy's business functions are governed by corporate environmental requirements and guidelines. Adopted by the Board of Directors in 2002, Entergy's Environmental Vision Statement details the company's commitment to operate its business in ways that preserve and protect our environment. Along with the company's aspirations, the statement guides business policies and decisions. Entergy also has established a Safety, Health & Environmental (SH&E) Policy and Functional Procedure that defines its overall governance structure, roles and responsibilities, and management system requirements. Each of Entergy's business functions has developed a management system that describes and defines its applicable policy/strategy, compliance requirements, risk assessment procedures, objective-setting process, programs/procedures, training process, self-assessment mechanisms and senior management review requirements. As a part of this management system, an aspect analysis/risk assessment is performed on all environmental media, including water. Impacts on both water quality and quantity are evaluated as a part of this process and ranked against other environmental aspects / impacts. Those rated as the most significant are targeted for improvement by various initiatives and projects.

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)

2019_Form_10-K.pdf

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	5-10	Entergy's Fleet Portfolio Transformation Strategy is currently in progress; the company has made significant progress and has added 3,928 MW of closed cycle cooling CCGT capacity since 2005. Assuming 100% capacity factor, this transformation strategy would result in a withdrawal reduction of more than 800 billion gallons of water.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	Entergy's business functions has developed a management system that describes and defines its long-term strategy, compliance requirements, risk assessment procedures, objective-setting process, programs/procedures, self-assessment mechanisms and senior management review requirements. Impacts on both water quality and quantity are evaluated as a part of this process. Senior Management reviews water issues quarterly at Environmental Leadership Team meetings, managing and monitoring the path towards achieving long term objectives.
Financial planning	Yes, water-related issues are integrated	5-10	Entergy's ERM process and investment approval process (IAP) are companywide processes used to identify material issues and strategic imperatives to analyse and prioritize environmental, weather and climate risks and opportunities for all businesses. The scope of the analysis includes evaluation of climate change proposals, adaptation issues, customer impacts, physical risks, economic impacts and litigation issues. Entergy's IAP requires projects of sufficient materiality to include scenarios reflecting the cost and/or benefits in regard to avoiding damage from extreme weather and other water related issues.

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)

0

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

0

Please explain

No substantial changes from the previous reporting period in capital spending or operational expenditures related to water.

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	Physical risks from today's climate and future climate change include increases in sea level (from both sea level rise and subsidence), wind and storm surge damages, wetland and barrier island erosion, risks of flooding and changes in weather conditions, such as changes in precipitation, average temperatures, and potential increased impacts of extreme weather conditions or storms. To respond to this, Entergy made improvements to our transmission system totalling about \$300 million. Today, we are investing approximately \$1 billion annually to improve our transmission infrastructure and reliability. In 2019 alone we completed projects at a cost of more than \$1 billion dollars that included facilities designed to better withstand storms. Entergy evaluates hardening strategies from a customer perspective, weighing the benefits of fewer and shorter outages against the high costs of hardening the system which our customers ultimately must pay for.

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	IEA Sustainable Development Scenario	Reduced water availability and changes to precipitation patterns due to climate change.	Climate change may cause increased water temperatures and reduced river flows during the summer months, making our steam electric power plants susceptible to significant disruptions in service at the times that our customers will need it the most. Entergy strives to be adaptable and work towards decreasing the amount of water required to operate its facilities. Entergy operates only one facility in a water stressed area, which is the Lewis Creek Power Plant in Willis, Texas. Entergy works with local regulators to optimize water use and will continue to utilize at least 30 percent less water than originally permitted. Additionally, Entergy's Fleet Portfolio Transformation Strategy is in progress; the company has made significant progress and has added 3,928 MW of closed cycle cooling CCGT capacity since 2005. Assuming 100% capacity factor, this transformation strategy would result in a withdrawal reduction of more than 800 billion gallons of water per year.

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

There is no plan in place yet to be pursued by Entergy.

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	Business level specific targets and/or goals Activity level specific targets and/or goals Site/facility specific targets and/or goals Country level targets and/or goals Basin specific targets and/or goals	Goals are monitored at the corporate level	Reducing our water use and conserving water resources are top sustainability priorities at Entergy, and this translates to our water related goals. We look for opportunities to reduce water use in our operations while evaluating water availability and ensuring compliance with state and local permits and requirements. At the Lewis Creek Plant in Willis, Texas, a water-constrained area, we worked with the water conservation district to optimize water use, gaining best practices that helped us use water wisely throughout our operations. By setting a site specific target and monitoring our progress, Entergy was able to exceed its water conservation goal of 30 percent water withdrawal by 2016 –a level which we have been able to maintain throughout 2019.

W8.1b

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

Goal

Other, please specify (Fleet Transformation)

Level

Business activity

Motivation

Cost savings

Description of goal

Replace open cycle legacy natural gas steam electric generating capacity with closed cycle cooling combined cycle gas turbines (CCGT). The water use intensity of the Legacy Gas units is 166 M3/MWh while the water use intensity of the CCGTs is 8 M3/MWh.

Baseline year

2000

Start year

2005

End year

2030

Progress

Entergy's Fleet Portfolio Transformation Strategy is in progress. This Fleet modernization will minimize Entergy's impact on water, as newer plants use significantly less water than our legacy units. Assuming 100% capacity factor, this transformation strategy would result in a withdrawal reduction of more than 800 billion gallons of water per year. Over the past 14 years, we have added approximately 6,000 MW of clean, highly efficient combined-cycle gas turbine generation, and allowed the deactivation of over 5,200 MW of older, less efficient gas or oil units.

Goal

Other, please specify (Nuclear Upgrades)

Level

Business activity

Motivation

Other, please specify (Increased production)

Description of goal

Invest in Nuclear Unit upgrades that increase generating capacity without requiring an incremental increase in water withdrawal requirements.

Baseline year

Start year

2012

End year

2030

Progress

Investing in our utility nuclear generation assets to maximize their output and ensure safe, reliable operation preserves the long-term benefits of the plants and is an important part of our environmental commitment to deliver low-emission energy to our customers. The Grand Gulf update was completed in 2015. During 2012, Entergy completed a 178 MW capacity upgrade at Grand Gulf Nuclear Station bringing the total upgrades since 2001 to 700 MW of new capacity that requires little or no incremental added cooling water. Assuming a 100% capacity factor, this strategy would result in a withdrawal reduction of large quantities of water per year.

Goal

Other, please specify (Energy Efficiency)

Level

Company-wide

Motivation

Other, please specify (Sales of new products/services)

Description of goal

The Entergy Utility companies are committed to pursuing cost effective DSM and have identified 990 MW of peak demand reduction that can be achieved through 2031 as a part of its Integrated Resources Plans.

Baseline year

Start year

2002

End year

2031

Progress

Significant progress has been made across regulated utilities that operate in multiple states. Entergy has invested more than \$600 million to deliver nearly 900 megawatts of peak load reduction and 2.7 million megawatt hours of cumulative energy savings, resulting in a savings of nearly 23 billion gallons of water per year. Currently, 30 energy efficiency and DSM programs are underway at Entergy.

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	Water withdrawals- total volumes	Other, please specify (Pump curves and run times are used to quantify this.)	Methodology explained.
W1 Current state	Water withdrawals- volume by sources	Other, please specify (Pump curves and run times are used to quantify this.)	Methodology explained.
W1 Current state	Water discharges- total volumes	Other, please specify (Federal and State NPDES Permit)	Standards and methodology as contained in Federal and State NPDES Permit.
W1 Current state	Water discharges- volume by destination	Other, please specify (Federal and State NPDES Permit)	Standards and methodology as contained in Federal and State NPDES Permit.
W1 Current state	Water discharge quality data- quality by standard effluent parameters	Other, please specify (Federal and State NPDES Permit)	Standards and methodology as contained in Federal and State NPDES Permit.

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.

Protecting the environment is one of many ways Entergy powers life and creates sustainable value for our stakeholders — customers, employees, communities and owners — and this has been true for many years. Water is a vital natural resource that is critical to Entergy's business operations. Entergy's facilities use water for cooling, boiler make-up, sanitary uses, potable supply, and many other uses. Risks to water supply issues are mitigated by using water-saving technologies, monitoring available supplies, and minimizing our water withdrawal in water-stressed areas. Additionally, water is recycled in some of our cooling systems and operate one air-cooled combined-cycle gas unit. Water quality is continuously protected and monitored through robust permitting and compliance programs.

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	Executive Vice President and General Counsel	Other C-Suite Officer

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)].

No

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	Investors	Public

Please confirm below

I have read and accept the applicable Terms