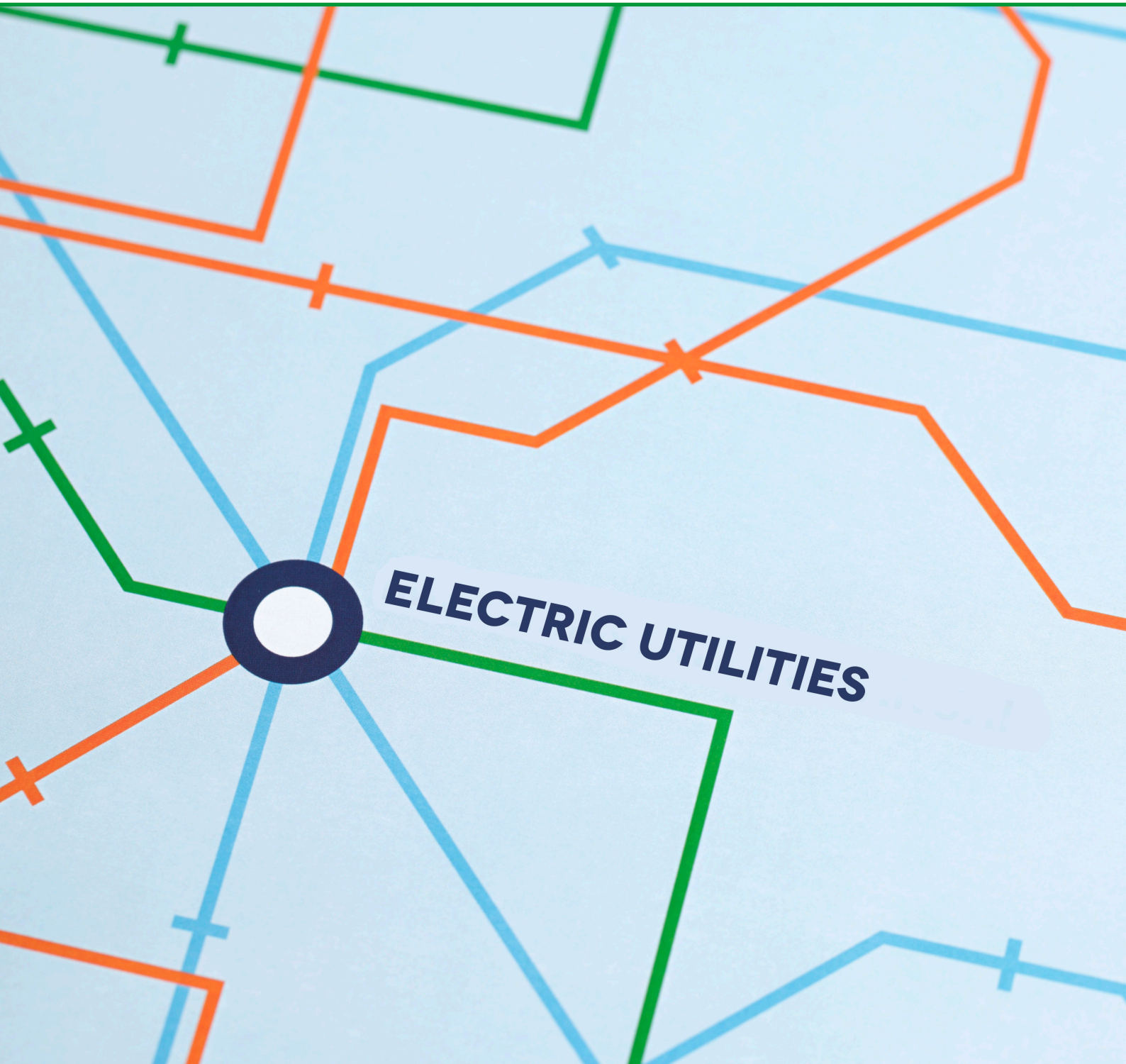
G4 SECTOR DISCLOSURES

Global Reporting Initiative™

ELECTRIC UTILITIES



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Legend

Chapters with a full color flag present sector content developed following GRI's due process

The contents of chapters with an outlined flag assist reporters when using the Sector Disclosures in conjunction with the G4 Guidelines

1 HOW TO USE THE SECTOR DISCLOSURES

The Electric Utilities Sector Disclosures document is based on the 'GRI Electric Utilities Sector Supplement'.

This Sector Supplement was issued in 2009 and developed based on the G3 Guidelines (2006). Following the launch of the G4 Guidelines in May 2013, the complete Sector Supplement content is now presented in the 'Electric Utilities Sector Disclosures' document, in a new format, to facilitate its use in combination with the G4 Guidelines.

The contents of the Sector Supplement have been re-organized and streamlined to fit the G4 Guidelines' content, structure and requirements. New contents have not been added.

This document has been prepared by the GRI Secretariat under the direction of the Technical Advisory Committee.

The Electric Utilities Sector Disclosures document contains a set of disclosures for use by all organizations in the Electric Utility sector. The disclosures cover key aspects of sustainability performance that are meaningful and relevant to the Electric Utility sector and which are not sufficiently covered in the G4 Guidelines.

The Electric Utilities Sector Disclosures should be used by all organizations in the Electric Utility sector that wish to prepare a report 'in accordance' with the G4 Guidelines, either Core or Comprehensive. Please consult the 'in accordance' criteria on pages 11-14 of the *G4 Guidelines – Reporting Principles and Standard Disclosures*.

The Electric Utilities Sector Disclosures should be used in addition to and not as a replacement of the G4 Guidelines. Together, the G4 Guidelines and the Electric Utilities Sector Disclosures make up the reporting framework for the Electric Utility sector.

This document contains additional disclosure requirements and guidance on existing G4 content, and standalone General Standard Disclosures, Aspects, Indicators and guidance for the sector. The following tables summarize the types of Sector Disclosures that are found in this document:

GENERAL STANDARD DISCLOSURES FOR THE SECTOR

GENERAL STANDARD DISCLOSURES FOR THE SECTOR	
Type of Sector Disclosure	**Explanation**
Sector additions to G4 General Standard Disclosures	
Additional disclosure requirements for G4 General Standard Disclosures	There may be additional disclosure requirements for any of the 58 General Standard Disclosures included in the G4 Guidelines. If an additional disclosure requirement relates to a General Standard Disclosure required under the chosen 'in accordance' option, it should be reported. *(*)Reasons for omission may apply in exceptional cases.*
Additional Guidance to G4 General Standard Disclosures	There may be additional sector Guidance for any of the 58 General Standard Disclosures included in the G4 Guidelines. This Guidance is not a requirement to be 'in accordance', for neither Core nor Comprehensive. Organizations should consult this Guidance when preparing a sustainability report.
Sector specific General Standard Disclosures	
General Standard Disclosures for the Sector	There may be standalone General Standard Disclosures for the sector. Organizations should report all these disclosures for either 'in accordance' option, Core and Comprehensive. These disclosures are labeled EU1, EU2, EU3, EU4 and EU5. *(*)Reasons for omission may apply in exceptional cases.*

(*) **Please note:** If it is not possible to disclose certain information required by the Electric Utilities Sector Disclosures, reasons for omission may apply in exceptional cases. Please consult the reasons for omission on page 13 of the *G4 Guidelines – Reporting Principles and Standard Disclosures*.

SPECIFIC STANDARD DISCLOSURES FOR THE SECTOR

SPECIFIC STANDARD DISCLOSURES FOR THE SECTOR	
Type of Sector Disclosure	**Explanation**
Sector specific Aspects	
Sector specific Aspects	There may be standalone Aspects for the sector. Organizations should consider the sector specific Aspects in this document together with the Aspects in the G4 Guidelines when defining the content of the report. The process for selecting material Aspects is described on pages 31-40 of the *G4 Guidelines – Implementation Manual*. The final selection of material Aspects may contain Aspects from the G4 Guidelines and sector specific Aspects from this Sector Disclosures document.
Sector specific Guidance for DMA	
Sector specific Guidance for DMA (Disclosures on Management Approach)	For each material Aspect identified (either from the G4 Guidelines or this Sector Disclosures document), organizations should report the Generic DMA (G4-DMA), for both Core and Comprehensive 'in accordance' options. The Generic DMA (G4-DMA) can be found on page 46 of the *G4 Guidelines – Reporting Principles and Standard Disclosures*. There may be sector specific Guidance for the DMA, for either G4 Aspects or sector specific Aspects. The sector specific Guidance for the DMA is designed to provide additional detail on the information to report for the Aspect. It is not a requirement to be 'in accordance', for neither Core nor Comprehensive. In the G3 Electric Utilities Sector Supplement, the sector specific Guidance for the DMA is considered to be a requirement. For this reason, organizations should consult the sector specific Guidance for the DMA when preparing a sustainability report.
Sector additions to G4 Indicators	
Additional disclosure requirements for G4 Indicators	There may be additional disclosure requirements for any of the Indicators included in the G4 Guidelines. For the 'in accordance' Core option: organizations choose at least one Indicator related to each identified material Aspect in G4 to report against. Organizations should report the additional disclosure requirements for the sector, if available, related to the chosen G4 Indicator(s). For the 'in accordance' Comprehensive option: organizations should report all Indicators available for the identified material Aspects in G4. Organizations should report all additional disclosure requirements for the sector, if available, related to the chosen G4 Indicators. *(*)Reasons for omission may apply in exceptional cases.*
Additional Guidance to G4 Indicators	There may be additional sector Guidance for any of the Indicators included in the G4 Guidelines. It is not a requirement to be 'in accordance', for neither Core nor Comprehensive. Organizations should consult this Guidance when preparing a sustainability report.

(*) **Please note:** If it is not possible to disclose certain information required by the Electric Utilities Sector Disclosures, reasons for omission may apply in exceptional cases. Please consult the reasons for omission on page 13 of the *G4 Guidelines – Reporting Principles and Standard Disclosures*.

SPECIFIC STANDARD DISCLOSURES FOR THE SECTOR CONTINUED

SPECIFIC STANDARD DISCLOSURES FOR THE SECTOR	
Type of Sector Disclosure	**Explanation**
Sector specific Indicators	
Sector specific Indicators located under G4 Aspects	There may be standalone sector specific Indicators added to existing G4 Aspects. Indicators are reported for material Aspects only as follows: For the 'in accordance' Core option: for each of the G4 Aspects identified as material, organizations should report at least one Indicator from the G4 Guidelines and (if available) one Indicator from the Sector Disclosures document related to the material Aspects. For the 'in accordance' Comprehensive option: for each of the G4 Aspects identified as material, organizations should report all the Indicators from the G4 Guidelines and (if available) all the Indicators from the Sector Disclosures document related to the material Aspects. These Indicators are labeled EU13, EU15, EU17, etc. *(*)Reasons for omission may apply in exceptional cases.*
Sector specific Indicators located under sector specific Aspects	There may be standalone sector specific Indicators located under sector specific Aspects. Indicators are reported for material Aspects only as follows: For the 'in accordance' Core option: organizations should report at least one Indicator related to the sector specific Aspects identified as material. For the 'in accordance' Comprehensive option: organizations should report all the Indicators related to the sector specific Aspects identified as material. These Indicators are labeled EU10, EU11, EU12, etc. *(*)Reasons for omission may apply in exceptional cases.*

(*) **Please note:** If it is not possible to disclose certain information required by the Electric Utilities Sector Disclosures, reasons for omission may apply in exceptional cases. Please consult the reasons for omission on page 13 of the *G4 Guidelines – Reporting Principles and Standard Disclosures*.

NOTES FOR EXPERIENCED GRI REPORTERS

GRI has made available a series of resources to help GRI sector reporters in their transition from G3/G3.1 to G4:

- *G4 Frequently Asked Questions*
- *Overview of changes in Standard Disclosures from G3.1 to G4 Guidelines*
- *Overview of changes in Standard Disclosures from G3 to G4 Guidelines*

The naming conventions of the GRI Standard Disclosures (including Indicators) have changed in G4. Consult the above tables for an overview of the changes in Standard Disclosures.

Annex I of this document provides an overview of how the Sector Disclosures have been re-organized to fit the new structure of the G4 Guidelines and includes references to the original disclosures' location in the Electric Utilities Sector Supplement (2009). For ease of reference, the Sector Disclosures' labels used in the Sector Supplement (EU1, EU2, EU3, etc.) have been retained.

NOTES FOR FIRST-TIME REPORTERS

First-time reporters are advised to consult and familiarize themselves with the contents of the G4 Guidelines before they start using the Sector Disclosures.

It is not necessary for first-time reporters to consult the Electric Utilities Sector Supplement (2009).

Note to users of an electronic version of this document:

Throughout Section 3, page references to Section 4 are hyperlinked. Clicking on these page references takes the user to the relevant page. To return to the previous view, please right click and select "Previous View" or click "alt" + left arrow.

2 INTRODUCTORY SECTION FOR THE ELECTRIC UTILITY SECTOR

2.1 FOR WHOM ARE THE SECTOR DISCLOSURES INTENDED?

The Electric Utilities Sector Disclosures are intended for organizations engaged in the generation, transmission, distribution or retail of electricity. The Electric Utilities Sector Disclosures' content is developed to be globally applicable to electric utilities regardless of their type of generation, size, ownership or range of activities within the sector.

In addition to G4, the Electric Utilities Sector Disclosures provide disclosures for key aspects of sustainability performance that are meaningful and relevant to the electric utility sector. Reporting using these sector specific disclosures provides stakeholders with the ability to evaluate an electric utility's sustainability performance on economic, environmental and social factors that are comparable with other electric utilities using the GRI Guidelines and Electric Utilities Sector Disclosures on a regional, national, and international scale. It also helps them to track the utility's performance over time. Many of the disclosures included within the Sector Disclosures could apply equally to a company's annual report.

This document includes additional disclosure requirements and guidance to existing G4 content and standalone General Standard Disclosures, Aspects, Indicators and guidance for the sector. This includes information on metrics, definitions, and calculation methods relevant to the sector. Some of the contents included in the Electric Utilities Sector Disclosures may be relevant to other sectors that have similar operational footprints or sustainability issues. Nonetheless, the contents included in the Electric Utilities Sector Disclosures are important and appropriate for the electric utility sector and should be used to guide sustainability reporting in this sector (i.e., reporting on economic, environmental, and social performance at an organizational-level).

2.2 HOW CAN DIVERSE ORGANIZATIONS IN THE ELECTRIC UTILITY SECTOR USE THE SECTOR DISCLOSURES?

Sustainability reporting is a process, and it does not begin or end with a printed or online publication. The process of reporting could provide opportunities to assess an organization's policies and programs and the economic, social and environmental impacts of its activities. This assessment can help the organization to determine necessary steps for further improvement, and reporting on these will indicate changes over time. It often takes time to build a system for reporting, from selection of issues to be addressed, collection of necessary data, and determining the means to communicate the relevant information to the stakeholders (the GRI Reporting Principles should be applied when determining report content).

In addition, due to the differences in generation types, size, ownership and governance, range of activities or applicable regulatory regimes of individual electric utilities within the sector, certain sector specific disclosures may not be readily applicable to all organizations in the sector. Therefore, reporting organizations should only report on disclosures that relate to material Aspects.

2.3 ECONOMIC, ENVIRONMENTAL AND SOCIAL FACTORS FOR THE SECTOR

Electric utilities provide essential and vital services to society and users. The services provided are crucial to the development and security of economies in all countries. Economic development must be achieved in a sustainable manner in order to protect key resource systems, and to provide for future generations. Specifically within the electric utility sector, a number of factors are fundamental in determining an electric utility's economic, environmental, and social sustainability performance as the generation, transmission, and distribution of electricity utilizes natural resources. These three sustainability factors – economic, environmental, and social performance – are captured by the disclosures included in the Electric Utilities Sector Disclosures.

Economic Factors:

Investments in new equipment and maintenance of existing infrastructure along with research and development of sustainable electricity generation, transmission and distribution, and end-user technologies all require significant financial resources. Stakeholders typically expect reporting organizations to develop strategies to appropriately allocate these financial resources, to provide reliable and high quality electricity supply into the future, to manage demand, and to provide shareholders and other stakeholders with the information necessary to assess the economic performance of the reporting organization.

Environmental Factors:

Stakeholders expect electric utilities to minimize the impact on the environment of the full life cycle of their business operations. Electric utilities are among the largest consumers of fossil fuels in the world, making fuel use/mix an increasingly important environmental concern. Fossil fuel combustion and other modes of electricity generation can result in wide spread environmental effects, including acid rain, climate change, radioactive and other contamination, and human health issues, if not adequately addressed in the electric power generation business. This has led electric utilities to consider strategies such as the installation of pollution control systems, development and utilization of power generation methods based on renewable energy and other non-fossil sources such as nuclear, wind, biomass, hydroelectric, and solar power, and to help meet demand with demand-side management solutions. These operational strategies include energy use reduction strategies as well as the shifting of electricity demand to off-peak hours of operation.

Social Factors:

Customers expect that electric utilities ensure the availability and reliability of electricity supply. In providing this electricity, electric utilities often engage stakeholders in decision making in order to achieve consistency with community goals and values. Electric utility assets and activities are often of a large scale, potentially impacting neighboring and distant communities. Stakeholders expect electric utilities to consider access to and affordability of electricity to all users for the overall sustainability of the community. The electric utility sector employs a workforce that can be exposed to potentially hazardous conditions such as high voltage electrical conductors and radiation at nuclear power facilities. Thus addressing workforce and safety issues are vital to the electric utilities' performance, since a qualified staff is fundamental to ensuring safe and reliable electricity services.

2.4 OVERARCHING ISSUES FOR THE SECTOR

In addition to the set of new sector specific disclosures, the following three topics have been identified as key topics that require special attention by the electric utilities for sustainability reporting:

Electric Utility Sector Regulatory and Market Structure

Electric utilities often operate in a heavily regulated environment, which may vary across geographic locations of operations. Sustainability reporting by electric utilities is expected to provide clarity in terms of the specific regulatory and market environments in which they operate, and the availability of natural resources. In particular, implications of privatization, market structure, tariffs, governmental requirements and planning should be explicitly considered in the reporting. Some of these regulations are still emerging or developing, and stakeholders expect electric utilities to keep abreast of these requirements and incorporate them into their sustainability considerations and reporting.

Stakeholder Engagement

As providers of an essential service and as users of natural resources, stakeholders expect electric utilities to build trusting relationships with stakeholders in order to operate legitimately and sustainably. Across all economic, environmental, social themes described in this document, particular attention is called for the engagement of stakeholders. Electric utilities are expected to disclose their approach to effective stakeholder engagement. Specific areas for consideration include: stakeholder identification, means of engagement, level and weighting of stakeholder representation in decision making processes. At a minimum, stakeholders include customers, neighbors, investors, shareholders, regulatory authorities, NGOs and other interested organizations, workers and civil society, with particular attention to vulnerable constituents.

Contracting and Supply Chain Practices

Electric utilities are often able to use their market presence and purchasing power to influence the social and environmental policies and practices of their suppliers and contractors. In fact in some cases, many of the major social and environmental impacts occur well upstream or downstream of the reporting organization's operations (e.g., upstream fuel supply issues as well as downstream end of life considerations regarding electricity use). Contractors are often involved in various aspects of provision of electricity, and contractor's performance can affect the environmental performance and safety and reliability of the core operations of the reporting organization.

Electric utilities are often able to monitor and report on the performance of contractors, where they are integral to the utility's operations, in order to ensure minimal risks to workers and communities as well as to ensure safety, reliability and security of the electricity supply. Electric utilities are encouraged to disclose their supply chain policies and practices regarding the products and services they purchase or contract when these policies and practices are relevant to sustainability issues. Typically, these policies and practices include capacity building in suppliers and contractors, workplace safety, waste disposal, protection of human rights, regulatory compliance and remediation efforts undertaken.

3 ELECTRIC UTILITIES SECTOR DISCLOSURES

3.1 OVERVIEW OF CONTENT FOR THE ELECTRIC UTILITY SECTOR

GENERAL STANDARD DISCLOSURES	
• Strategy and Analysis • **Organizational Profile ✚** • Identified Material Aspects and Boundaries • Stakeholder Engagement	• Report Profile • Governance • Ethics and Integrity

SPECIFIC STANDARD DISCLOSURES				
Category	**Economic**		**Environmental**	
Aspects[1]	• Economic Performance • Market Presence • Indirect Economic Impacts • Procurement Practices • **Availability and Reliability ✚✚** • **Demand-Side Management ✚✚** • **Research and Development ✚✚** • **Plant Decommissioning ✚✚** • **System Efficiency ✚✚**		• **Materials ✚** • Energy • **Water ✚** • **Biodiversity ✚** • **Emissions ✚** • **Effluents and Waste ✚** • Products and Services • Compliance • Transport • Overall • Supplier Environmental Assessment • Environmental Grievance Mechanisms	
Category	**Social**			
Sub-Categories	**Labor Practices and Decent Work**	**Human Rights**	**Society**	**Product Responsibility**
Aspects[1]	• **Employment ✚** • Labor/Management Relations • **Occupational Health and Safety ✚** • Training and Education • Diversity and Equal Opportunity • Equal Remuneration for Women and Men • Supplier Assessment for Labor Practices • Labor Practices Grievance Mechanisms	• Investment • Non-discrimination • **Freedom of Association and Collective Bargaining ✚** • Child Labor • Forced or Compulsory Labor • Security Practices • Indigenous Rights • Assessment • Supplier Human Rights Assessment • Human Rights Grievance Mechanisms	• **Local Communities ✚** • Anti-corruption • Public Policy • Anti-competitive Behavior • Compliance • Supplier Assessment for Impacts on Society • Grievance Mechanisms for Impacts on Society • **Disaster/ Emergency Planning and Response ✚✚**	• **Customer Health and Safety ✚** • Product and Service Labeling • Marketing Communications • Customer Privacy • Compliance • **Access ✚✚** • **Provision of Information ✚✚**

1) The word **topic** is used in the Guidelines to refer to any possible sustainability subject. The word **Aspect** is used in the Guidelines to refer to the list of subjects covered by the Guidelines.

✚ G4 General Standard Disclosures and G4 Aspects where sector specific content has been added.

✚✚ Sector specific Aspects.

3.2 GENERAL STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR

GENERAL STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Section	**Sector Disclosures**
Organizational Profile	**SECTOR ADDITIONS TO G4 GENERAL STANDARD DISCLOSURES** **G4-10** **Additional disclosure requirements** Report on total contractor workforce (contractor, subcontractor, independent contractor) by employment type, employment contract and regulatory regime. **Additional Guidance** **Definitions** See definitions of 'Contractors', 'Sub-contractors' and 'Independent contractors' in the *G4 Implementation Manual* p. 253. *See entire G4-10 in the G4 Implementation Manual pp. 26-27* **G4-11** **Additional disclosure requirements** Report on percentage of contractor employees (contractor, sub-contractor and independent contractor) working for the reporting organization covered by collective bargaining agreements by country or regulatory regime. **Additional Guidance** **Definitions** See definitions of 'Contractors', 'Sub-contractors' and 'Independent contractors' in the *G4 Implementation Manual* p. 253. *See entire G4-11 in the G4 Implementation Manual p. 28*

GENERAL STANDARD DISCLOSURES FOR THE SECTOR CONTINUED

GENERAL STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Section	**Sector Disclosures**
Organizational Profile (cont.)	**SECTOR SPECIFIC GENERAL STANDARD DISCLOSURES** **EU1** **INSTALLED CAPACITY, BROKEN DOWN BY PRIMARY ENERGY SOURCE AND BY REGULATORY REGIME** See disclosure requirements and Guidance on p. 28 **EU2** **NET ENERGY OUTPUT BROKEN DOWN BY PRIMARY ENERGY SOURCE AND BY REGULATORY REGIME** See disclosure requirements and Guidance on p. 29 **EU3** **NUMBER OF RESIDENTIAL, INDUSTRIAL, INSTITUTIONAL AND COMMERCIAL CUSTOMER ACCOUNTS** See disclosure requirements and Guidance on p. 30 **EU4** **LENGTH OF ABOVE AND UNDERGROUND TRANSMISSION AND DISTRIBUTION LINES BY REGULATORY REGIME** See disclosure requirements and Guidance on p. 31 **EU5** **ALLOCATION OF CO_2E EMISSIONS ALLOWANCES OR EQUIVALENT, BROKEN DOWN BY CARBON TRADING FRAMEWORK** See disclosure requirements and Guidance on p. 32

3.3 SPECIFIC STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR

IMPORTANT NOTE

This section is organized by (sub-)Category and Aspect. For each (sub-)Category, G4 Aspects are presented first and the sector specific Aspects are presented last. Only G4 Aspects that contain sector additions are presented in this section.

The following Aspects and related disclosures should only be reported if they have been identified as material. The Reporting Principles for Defining Report Content have been designed to assist organizations in identifying material Aspects. (The description of these Principles, as well as Guidance on how to apply them, can be found in the *G4 Implementation Manual* on pp. 9-13 and pp. 31-40.)

CATEGORY: ECONOMIC

ECONOMIC DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
Sector specific Aspects	
Availability and Reliability	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Management approach to ensure short and long-term electricity availability and reliability (former EU6) See full Guidance text on p. 33
	SECTOR SPECIFIC INDICATORS EU10 **PLANNED CAPACITY AGAINST PROJECTED ELECTRICITY DEMAND OVER THE LONG TERM, BROKEN DOWN BY ENERGY SOURCE AND REGULATORY REGIME** See disclosure requirements and Guidance on p. 34
Demand-Side Management	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Demand-side management programs including residential, commercial, institutional and industrial programs (former EU7) See full Guidance text on p. 35
	SECTOR SPECIFIC INDICATORS *This sector specific Aspect does not contain Indicators.*[2]

2) To address this Aspect, the organization may use alternative indicators or develop their own indicators. Organization-specific indicators included in the report should be subject to the GRI Reporting Principles and have the same technical rigor as GRI's Standard Disclosures.

ECONOMIC DISCLOSURES FOR THE SECTOR CONTINUED

ECONOMIC DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
Sector specific Aspects	
Research and Development	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development (former EU8) See full Guidance text on p. 36
	SECTOR SPECIFIC INDICATORS *This sector specific Aspect does not contain Indicators.*[3]
Plant Decommissioning	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Provisions for decommissioning of nuclear power sites (former EU9) See full Guidance text on p. 37
	SECTOR SPECIFIC INDICATORS *This sector specific Aspect does not contain Indicators.*[4]
System Efficiency	**SECTOR SPECIFIC INDICATORS** EU11 **AVERAGE GENERATION EFFICIENCY OF THERMAL PLANTS BY ENERGY SOURCE AND BY REGULATORY REGIME** See disclosure requirements and Guidance on p. 38 EU12 **TRANSMISSION AND DISTRIBUTION LOSSES AS A PERCENTAGE OF TOTAL ENERGY** See disclosure requirements and Guidance on p. 39

3) To address this Aspect, the organization may use alternative indicators or develop their own indicators. Organization-specific indicators included in the report should be subject to the GRI Reporting Principles and have the same technical rigor as GRI's Standard Disclosures.

4) To address this Aspect, the organization may use alternative indicators or develop their own indicators. Organization-specific indicators included in the report should be subject to the GRI Reporting Principles and have the same technical rigor as GRI's Standard Disclosures.

CATEGORY: ENVIRONMENTAL

ENVIRONMENTAL DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
G4 Aspects	
Materials	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Describe long-term strategy for managing and phasing out high level and low level in-service PCBs. **Compilation** Identify high level and low level as defined by the reporting organization according to prevailing national or regional standards. Use >500 ppm as the high level threshold in the absence of such standards. Reporting threshold for low level should be according to the prevailing national/regional standards or, if no standards exist, between 50 and 500 ppm.
	SECTOR ADDITIONS TO G4 INDICATORS G4-EN1 **MATERIALS USED BY WEIGHT OR VOLUME** **Additional disclosure requirements** Report in-use inventory of solid and liquid high level and low level PCBs contained in equipment. *See entire G4-EN1 in the G4 Implementation Manual p. 86*
Water	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** At the watershed or hydrological basin level, include collaborative approaches to managing watersheds and reservoirs for multiple uses (e.g., irrigation, drinking water, ecosystem conservation, etc.). Also report long-term planning for securing water resources, for meeting the needs of both the utility and other stakeholders (e.g. local communities). This includes describing the criteria for managing maximum/minimum flow of surface water and volume of ground water and how these are determined and maintained.
	SECTOR ADDITIONS TO G4 INDICATORS G4-EN8 **TOTAL WATER WITHDRAWAL BY SOURCE** **Additional disclosure requirements** Report overall water usage for processing, cooling and consumption in thermal and nuclear power plants, including use of water in ash handling and coal cleaning. *See entire G4-EN8 in the G4 Implementation Manual p. 97*

ENVIRONMENTAL DISCLOSURES FOR THE SECTOR CONTINUED

ENVIRONMENTAL DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
G4 Aspects	
Biodiversity	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Report approaches for pest and vegetation management along transmission and distribution corridors (e.g., use of Integrated Pest Management and Integrated Vegetation Management). Report the approaches to assess impacts (including fragmentation and isolation), develop mitigation measures and monitor residual effects at new and existing sites on the following: • Forested areas (e.g., alterations to tree crown density, loss of indigenous species); • Landscape (e.g., impacts of wind farms, transmission lines); and • Marine, freshwater and wetland ecosystems (e.g., downstream water quality including turbidity, sedimentation, siltation and water quality of reservoir and other water bodies). Assessment and mitigation should consider conservation plans for indigenous species, alterations in the migration, breeding, or habitat of animals (e.g., fish passage) from the reporting organization's infrastructure (e.g., power lines and dams). *See entire Aspect-specific Guidance for DMA in the G4 Implementation Manual p. 100* **SECTOR ADDITIONS TO G4 INDICATORS** G4-EN12 **DESCRIPTION OF SIGNIFICANT IMPACTS OF ACTIVITIES, PRODUCTS, AND SERVICES ON BIODIVERSITY IN PROTECTED AREAS AND AREAS OF HIGH BIODIVERSITY VALUE OUTSIDE PROTECTED AREAS** **Additional disclosure requirements** Report the nature of significant direct and indirect impacts on biodiversity with reference to one or more of the following: • Maintenance of transmission line corridors • Fragmentation and isolation (islandization) • Impacts of thermal discharge **Additional Guidance** **Definitions** ***Thermal Discharges*** Waste heat from power plant operations released into the environment. This usually refers to water that is pumped from a nearby body for use as condenser cooling water, where it picks up heat and then is discharged back into the water body. The heated water thus adds thermal energy to the water body, which may have an effect on the local ecosystems. *See entire G4-EN12 in the G4 Implementation Manual p. 102*

ENVIRONMENTAL DISCLOSURES FOR THE SECTOR CONTINUED

ENVIRONMENTAL DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
G4 Aspects	
Biodiversity (Cont.)	**SECTOR SPECIFIC INDICATORS** **EU13** **BIODIVERSITY OF OFFSET HABITATS COMPARED TO THE BIODIVERSITY OF THE AFFECTED AREAS** See disclosure requirements and Guidance on p. 40
Emissions	**SECTOR ADDITIONS TO G4 INDICATORS** **G4-EN15** **DIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 1)** **Additional disclosure requirements** Report CO_2e per MWh, broken down by regulatory regime, for: • Net generation from all generating capacity; • Net generation from all fossil fuel generation; and • Estimated net delivery to end users. This includes emissions from own generation. **Additional Guidance** **Compilation** The first bullet refers to the emissions intensity for all generating capacity, and the second bullet refers to that of the fossil generation capacity. A breakdown by regulatory regime is necessary because of the different CO_2e allocation schemes in place. **Definitions** ***Regulatory regime*** Regulatory regime refers to local, sub-national, national or regional area where there is a common regulatory framework. ***Net*** Net refers to electricity output to the grid from the power plant. *See entire G4-EN15 in the G4 Implementation Manual pp. 107-109*

ENVIRONMENTAL DISCLOSURES FOR THE SECTOR CONTINUED

ENVIRONMENTAL DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
G4 Aspects	
Emissions (Cont.)	**SECTOR ADDITIONS TO G4 INDICATORS (CONT.)** G4-EN16 **ENERGY INDIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 2)** **Additional disclosure requirements** Report CO_2e per MWh, broken down by regulatory regime, for: • Estimated net delivery to end users. This includes emissions from purchased power. **Additional Guidance** **Compilation** A breakdown by regulatory regime is necessary because of the different CO_2e allocation schemes in place. **Definitions** ***Regulatory regime*** Regulatory regime refers to local, sub-national, national or regional area where there is a common regulatory framework. ***Net*** Net refers to electricity output to the grid from the power plant. *See entire G4-EN16 in the G4 Implementation Manual pp. 110-111* G4-EN21 **NO_X, SO_X, AND OTHER SIGNIFICANT AIR EMISSIONS** **Additional disclosure requirements** Report emissions per MWh for: • Net generation from all generating capacity; • Net generation from all combustion power plants; **Additional Guidance** **Compilation** Examples of "other significant air emissions" include but are not limited to mercury, coal pile dust, ash lagoons or ponds, precipitator dust, and reservoir draw down dust. *See entire G4-EN21 in the G4 Implementation Manual pp. 119-120*

ENVIRONMENTAL DISCLOSURES FOR THE SECTOR CONTINUED

ENVIRONMENTAL DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
G4 Aspects	
Effluents and Waste	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Describe the management strategy and storage methods for different types of radioactive nuclear waste, including: • Temporary and permanent storage; • Environmental, health and safety impacts of radioactive nuclear waste; and • Security measures according to the applicable management standards/legislative framework. **Compilation** Radioactive nuclear waste includes Low Level Radioactive Waste, Intermediate Level. Radioactive Waste and High Level Radioactive Waste. Include mixed waste (radioactive and hazardous). Use IAEA definitions.
	SECTOR ADDITIONS TO G4 INDICATORS G4-EN22 **TOTAL WATER DISCHARGE BY QUALITY AND DESTINATION** **Additional disclosure requirements** Include thermal discharges as part of the total volume of planned and unplanned water discharges. **Additional Guidance** **Definitions** ***Thermal Discharges*** Waste heat from power plant operations released into the environment. This usually refers to water that is pumped from a nearby body for use as condenser cooling water, where it picks up heat and then is discharged back into the water body. The heated water thus adds thermal energy to the water body, which may have an effect on the local ecosystems. *See entire G4-EN22 in the G4 Implementation Manual p. 122*

ENVIRONMENTAL DISCLOSURES FOR THE SECTOR CONTINUED

ENVIRONMENTAL DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
G4 Aspects	
Effluents and Waste (Cont.)	**SECTOR ADDITIONS TO G4 INDICATORS (CONT.)** G4-EN23 **TOTAL WEIGHT OF WASTE BY TYPE AND DISPOSAL METHOD** **Additional disclosure requirements** Include PCB waste as part of the total weight of hazardous and non-hazardous waste. Report on nuclear waste using IAEA definitions and protocols. Report mass and activity of spent nuclear fuel sent for processing and reprocessing per year. In addition, report radioactive waste produced per net MWh nuclear generation per year. Report (in terms of mass and activity) low/ intermediate level waste and high level waste separately, based on IAEA radioactive waste classification. This should also include waste produced from reprocessing activities, where data is available. **Additional Guidance** **Definitions** ***Polychlorinated Biphenyls (PCBs)*** A group of toxic, bioaccumulative, and persistent chemicals used as an insulating medium intransformers and capacitors. *See entire G4-EN23 in the G4 Implementation Manual p. 123*

CATEGORY: SOCIAL

SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK

LABOR PRACTICES AND DECENT WORK DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
G4 Aspects	
Employment	**SECTOR SPECIFIC GUIDANCE FOR DMA** **G4-DMA** **Additional Guidance** Programs and processes to ensure the availability of a skilled workforce (former EU14) See full Guidance text on p. 41 Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors (former EU16) See full Guidance text on p. 42 *See entire Aspect-specific Guidance for DMA in the G4 Implementation Manual pp. 144-145*
	SECTOR ADDITIONS TO G4 INDICATORS **G4-LA1** **TOTAL NUMBER AND RATES OF NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER BY AGE GROUP, GENDER, AND REGION** **Additional disclosure requirements** For the employees leaving employment during the reporting period, provide the average length of tenure of employees leaving broken down by gender and age group. *See entire G4-LA1 in the G4 Implementation Manual p. 146*
	SECTOR SPECIFIC INDICATORS **EU15** **PERCENTAGE OF EMPLOYEES ELIGIBLE TO RETIRE IN THE NEXT 5 AND 10 YEARS BROKEN DOWN BY JOB CATEGORY AND BY REGION** See disclosure requirements and Guidance on p. 43 **EU17** **DAYS WORKED BY CONTRACTOR AND SUBCONTRACTOR EMPLOYEES INVOLVED IN CONSTRUCTION, OPERATION & MAINTENANCE ACTIVITIES** See disclosure requirements and Guidance on p. 44 **EU18** **PERCENTAGE OF CONTRACTOR AND SUBCONTRACTOR EMPLOYEES THAT HAVE UNDERGONE RELEVANT HEALTH AND SAFETY TRAINING** See disclosure requirements and Guidance on p. 45

SOCIAL DISCLOSURES FOR THE SECTOR CONTINUED

LABOR PRACTICES AND DECENT WORK DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
G4 Aspects	
Occupational Health and Safety	**SECTOR ADDITIONS TO G4 INDICATORS** **G4-LA6** **TYPE OF INJURY AND RATES OF INJURY, OCCUPATIONAL DISEASES, LOST DAYS, AND ABSENTEEISM, AND TOTAL NUMBER OF WORK RELATED FATALITIES, BY REGION AND BY GENDER** **Additional disclosure requirements** Report on health and safety performance of contractors and subcontractors working onsite or on behalf of the reporting organization off site. **Additional Guidance** **Relevance** Some electric utility workers engage in high-risk activities. This work can be equally high risk for contractors and subcontractors. *See entire G4-LA6 in the G4 Implementation Manual pp. 153-154*

SUB-CATEGORY: HUMAN RIGHTS

HUMAN RIGHTS DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
G4 Aspects	
Freedom of Association and Collective Bargaining	**SECTOR SPECIFIC GUIDANCE FOR DMA** **G4-DMA** **Additional Guidance** Report on management mechanisms to address the right to organize, right to bargain and right to strike or instances of lock out, given the context of the industry's need to ensure continuous provision of essential services. Where the right to strike does not exist or is limited, report on remedial measures such as binding arbitration. Where freedom of association or expression are limited or prevented by regulatory regime, report on mechanisms and processes that exist for getting employee input on conditions of employment. *See entire Aspect-specific Guidance for DMA in the G4 Implementation Manual p. 180*

SOCIAL DISCLOSURES FOR THE SECTOR CONTINUED

SUB-CATEGORY: SOCIETY

SOCIETY DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
G4 Aspects	
Local Communities	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Stakeholder participation in decision making processes related to energy planning and infrastructure development (former EU19) See full Guidance text on pp. 46-47 Approach to managing the impacts of displacement (former EU20) See full Guidance text on p. 48 Report whether the organization's programs for managing community impacts have been effective in mitigating negative impacts and maximizing positive impacts, including the scale of persons affected. Include discussions of programs related to: • Ways in which information is exchanged and local population is involved, prior, during and after the event and the provision for intervener funding for the local population; • Influx of workers and impacts on neighboring communities (including changes to local social structures and culture); • Changes to land-use including loss of global commons (e.g. access to land, natural resources, and heritage); • Impacts on infrastructure (e.g. roads, housing), and access to services (e.g. education, utilities, healthcare); and • Changes to the aesthetics and quality of the landscape. **Definitions** ***Intervener funding*** This refers to the funding of stakeholders who provide input in to the regulatory process. The funding is provided by the regulatory body, the electric utility or the state. *See entire Aspect-specific Guidance for DMA in the G4 Implementation Manual p. 199*
	SECTOR SPECIFIC INDICATORS EU22 **NUMBER OF PEOPLE PHYSICALLY OR ECONOMICALLY DISPLACED AND COMPENSATION, BROKEN DOWN BY TYPE OF PROJECT** See disclosure requirements and Guidance on p. 49

SOCIAL DISCLOSURES FOR THE SECTOR CONTINUED

SOCIETY DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
Sector specific Aspects	
Disaster/ Emergency Planning and Response	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans (former EU21) See full Guidance text on p. 50 *See entire Aspect-specific Guidance for DMA in the G4 Implementation Manual p. 180*
	SECTOR SPECIFIC INDICATORS *This sector specific Aspect does not contain Indicators.*[5]

5) To address this Aspect, the organization may use alternative indicators or develop their own indicators. Organization-specific indicators included in the report should be subject to the GRI Reporting Principles and have the same technical rigor as GRI's Standard Disclosures.

SUB-CATEGORY: PRODUCT RESPONSIBILITY

PRODUCT RESPONSIBILITY DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
G4 Aspects	
Customer Health and Safety	**SECTOR SPECIFIC GUIDANCE FOR DMA** **G4-DMA** **Additional Guidance** For electric utilities the following categories should also be assessed: • Resource planning • Generation • Transmission • Distribution • Use State the processes for assessing community health risks including monitoring, prevention measures and, if applicable, long term health-related studies. Identify community health risks that are assessed such as: • Compliance with exposure limit(s) to electric fields (in kV per m) and magnetic fields (in µT) where available, for members of the public and employees in the areas in which the reporting organization operates. **Definitions** ***Community health risks*** Community health risks can include issues such as exposure to electric and magnetic fields, emissions, noise, diseases, etc. Long-term health related studies may include epidemiological studies. ***Electric Fields*** An electric field is an invisible force field created by the attraction and repulsion of electrical charges (the cause of electric flow), and is measured in Volts per meter (V/m). The intensity of the electric field decreases with distance from the field source. ***Magnetic Fields*** A magnetic field is an invisible force field created as a consequence of the movement of electric charges (flow of electricity). The magnitude (intensity) of a magnetic field is measured Tesla (T or in mT).The intensity of the field decreases with distance from the field source. *See entire Aspect-specific Guidance for DMA in the G4 Implementation Manual p. 222* **SECTOR SPECIFIC INDICATORS** **EU25** **NUMBER OF INJURIES AND FATALITIES TO THE PUBLIC INVOLVING COMPANY ASSETS, INCLUDING LEGAL JUDGMENTS, SETTLEMENTS AND PENDING LEGAL CASES OF DISEASES** See disclosure requirements and Guidance on p. 51

SOCIAL DISCLOSURES FOR THE SECTOR CONTINUED

PRODUCT RESPONSIBILITY DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Sector Disclosures**
Sector specific Aspects	
Access	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services (former EU23) See full Guidance text on p. 52
	SECTOR SPECIFIC INDICATORS EU26 **PERCENTAGE OF POPULATION UNSERVED IN LICENSED DISTRIBUTION OR SERVICE AREAS** See disclosure requirements and Guidance on p. 53 EU27 **NUMBER OF RESIDENTIAL DISCONNECTIONS FOR NON-PAYMENT, BROKEN DOWN BY DURATION OF DISCONNECTION AND BY REGULATORY REGIME** See disclosure requirements and Guidance on p. 54 EU28 **POWER OUTAGE FREQUENCY** See disclosure requirements and Guidance on p. 55 EU29 **AVERAGE POWER OUTAGE DURATION** See disclosure requirements and Guidance on p. 56 EU30 **AVERAGE PLANT AVAILABILITY FACTOR BY ENERGY SOURCE AND BY REGULATORY REGIME** See disclosure requirements and Guidance on p. 57
Provision of Information	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services (former EU24) See full Guidance text on p. 58
	SECTOR SPECIFIC INDICATORS *This sector specific Aspect does not contain Indicators.*[6]

6) To address this Aspect, the organization may use alternative indicators or develop their own indicators. Organization-specific indicators included in the report should be subject to the GRI Reporting Principles and have the same technical rigor as GRI's Standard Disclosures.

4 FULL TEXT FOR THE ELECTRIC UTILITIES SECTOR DISCLOSURES

4.1 FULL TEXT FOR GENERAL STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR

Organizational Profile

EU1

INSTALLED CAPACITY, BROKEN DOWN BY PRIMARY ENERGY SOURCE AND BY REGULATORY REGIME

1. Relevance

The installed capacity of the reporting organization broken down by primary energy source and by regulatory regime, shows in more detail the reporting organization's operations within a regulatory regime or geographic context. An understanding of installed capacity provides an initial indication of the environmental, social and economic impacts likely to arise from a given power generation portfolio based on footprint of infrastructure.

The breakdown by regulatory regime or geographic context is necessary as it provides a consistent framework for measuring and reporting of utility activities.

2. Compilation

2.1 Describe the fuels used and the capacity of multi-fuel plants.

2.2 For combined heat and power plants, the reporting organization should report nominal electricity capacity and heat capacity (MW).

2.3 Report installed capacity of the utility in MW. This should be broken down by the total installed capacity, installed capacity by energy source and installed capacity by regulatory regime.

3. Definitions

Primary Source

The initial form of energy consumed to satisfy the reporting organization's energy demand. This energy is used either to provide final energy services (e.g., space heating, transport) or to produce intermediate forms of energy, such as electricity and heat. Examples of primary energy include non-renewable sources such as coal, natural gas, oil, and nuclear energy. It also includes renewable sources such as biomass, solar, wind, geothermal, and hydro energy. Primary energy might be consumed on-site (e.g., natural gas to heat the reporting organization's buildings) or off-site (e.g., natural gas consumed by the power plants that provide electricity to the reporting organization's facilities).

Regulatory Regime

A regulatory regime is defined as a local, subnational, national or regional area where there is a common regulatory framework.

Capacity

Capacity is the maximum amount of power, in MW, that an entity can produce. Utilities are asked to report net capacity, i.e. maximum capacity a power station is designed to deliver to the grid. Internal use of electricity for auxiliary systems is excluded.

EU2

NET ENERGY OUTPUT BROKEN DOWN BY PRIMARY ENERGY SOURCE AND BY REGULATORY REGIME

1. Relevance

The net energy output of the reporting organization broken down by primary energy source and by regulatory regime or geographic context, shows in more detail the reporting organization's operations. An understanding of net energy output provides an indication of the environmental, social and economic impacts likely to arise from a given power generation portfolio based on actual output.

The breakdown by regulatory regime or geographic context is necessary as it provides a consistent framework for measuring and reporting of utility activities.

This relates to G4-EN3 which considers energy consumption.

2. Compilation

2.1 Describe net energy generated by the utility in GWh or GJ (for where heat is a secondary product). This should be broken down by primary energy source and by regulatory regime.

3. Definitions

Primary Source

The initial form of energy consumed to satisfy the reporting organization's energy demand. This energy is used either to provide final energy services (e.g., space heating, transport) or to produce intermediate forms of energy, such as electricity and heat. Examples of primary energy include non-renewable sources such as coal, natural gas, oil, and nuclear energy. It also includes renewable sources such as biomass, solar, wind, geothermal, and hydro energy. Primary energy might be consumed on-site (e.g., natural gas to heat the reporting organization's buildings) or off-site (e.g., natural gas consumed by the power plants that provide electricity to the reporting organization's facilities).

Regulatory Regime

A regulatory regime is defined as a local, subnational, national or regional area where there is a common regulatory framework.

4. Documentation

None.

5. References

None.

EU3

NUMBER OF RESIDENTIAL, INDUSTRIAL, INSTITUTIONAL AND COMMERCIAL CUSTOMER ACCOUNTS

1. Relevance

The number of residential, industrial, institutional and customer accounts gives an overall view on the scale of business generated by the reporting organisation. This Standard Disclosure shows the scale of the business from the point of view of the number of customers, as opposed to EU1 which shows generation capacity and EU4 which shows the extent of the energy transmission and distribution infrastructure. This information also provides information on the growth patterns of the company over time.

2. Compilation

2.1 A customer account may include more than one connection. Types of account include residential, industrial, commercial, and institutional. The reporting organization may wish to report this information, expanding on the table below.

2.2 The reporting company should clearly define the types of account they are reporting (this should include any additional account types not listed in the table).

2.3 Report the total number of accounts by type and by point of connection (e.g. transmission, or distribution) and customers who are also producers (i.e. customers who use distributed generation).

NUMBER OF ACCOUNTS BY TYPE AND POINT OF CONNECTION		
Type of account	**Point of connection**	
	Transmission	**Distribution**
Residential		
Industrial Commercial		
Institutional		

3. Definitions

Customer accounts

Customer accounts refer to number of connections to the grid.

4. Documentation

Information sources include billing department, finance department or the annual report.

5. References

None.

EU4

LENGTH OF ABOVE AND UNDERGROUND TRANSMISSION AND DISTRIBUTION LINES BY REGULATORY REGIME

1. Relevance

The length of transmission and distribution lines shows the extent of the reporting organisation's energy transmission and distribution infrastructure as opposed to EU1 which shows generation capacity and EU3 which shows the scale of the business from the point of view of the number of customers. It also gives an impression on the overall scale of the utility. Annual figures enable assessments to be made on the growth or decline of the infrastructure in place.

2. Compilation

2.1 Identify the range of voltage levels used to categorize transmission and distribution lines.

2.2 Declare any assumptions made for estimates of circuit lengths.

2.3 Report aggregated circuit lengths in km, by regulatory regime, voltage category, and overhead and/or underground.

3. Definitions

Circuit length

Circuit length is the length of one circuit consisting of 3 cables between two rail systems. Usually electricity is transported and distributed as 3 phase high voltage AC. One circuit consists of three cables each bearing one phase. As the three cables form a physical entity, circuit length is defined as the length of one entity between two rail systems. i.e. in case where there are two circuits of 2 km on the same track this means 2X2 km = 4 km. In the case of High Voltage DC the same definition applies independently of a single line or bipolar layout of the transmission line.

Transmission Lines

Transmission lines transfer electrical power from power stations to substations.

Distribution Lines

Distribution lines transfer electrical power from substations to customers.

4. Documentation

None.

5. References

None.

EU5

ALLOCATION OF CO_2E EMISSIONS ALLOWANCES OR EQUIVALENT, BROKEN DOWN BY CARBON TRADING FRAMEWORK

1. Relevance

There are numerous national and international regulations and incentive systems (such as trading or carbon certificating) designed to control the volume and reward the reduction of CO_2 equivalents. By monitoring and setting reduction targets, emissions can be reduced effectively (e.g., by carefully selecting energy-efficient materials, services, or production capabilities).

CO_2e emissions allowances can be auctioned or allocated for free, impacting the cost burden to utilities. Reporting on the allocation of CO_2e emission allowances for a utility, illustrates the exposure the organization has to current or future national and international climate change policies. It also provides an illustration of the strategy used by the organization to manage CO_2e emissions (e.g. buying allowances from companies that do not use their full allocation of CO_2e emissions, or selling to those that have exceeded their allocation).

This Standard Disclosure is only relevant to those organisations operating in markets with either voluntary or legally-binding CO_2e trading schemes.

2. Compilation

2.1 Report qualitatively how the reporting organization is covered by emissions trading schemes or alternative requirements for managing CO_2e emissions.

2.2 Report quantitatively potential CO_2e emission allocations or the emission reduction targets that are likely to be required of the reporting organization. If CO_2e emission allowances have been allocated by assignment or auctioned, by a public sector body, they should be reported by regulatory regime.

2.3 Report percentage of allowances allocated for free and percentage auctioned.

3. Definitions

Carbon trading framework

Carbon trading framework refers to local, subnational, national or regional initiatives which establish an emissions trading scheme.

Allowances

An allowance represents a fixed quantity of CO_2e. These are the units which are capped, traded and surrendered in an emissions scheme. Allowances are also sometimes known as permits, certificates, credits, or allocations.

Auctioning

In an emissions trading scheme, auctioning is an allocation method by which CO_2e certificates are sold to the participants to the highest bidders, as opposed to allocating them for free.

Carbon dioxide equivalent

CO_2 (carbon dioxide) equivalent is the universal unit of measurement used to compare the emissions from various GHGs based on their global warming potential (GWP). The CO_2 equivalent for a gas is determined by multiplying the metric tons of the gas by the associated GWP.

4. Documentation

None.

5. References

None.

4.2 FULL TEXT FOR SPECIFIC STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR

CATEGORY: ECONOMIC

Sector specific Aspect: Availability and Reliability

GUIDANCE - DISCLOSURES ON MANAGEMENT APPROACH

Management approach to ensure short and long-term electricity availability and reliability (former EU6)

1. Relevance

This provides information on the reporting organization's plans and processes to ensure reliability, delivering sufficient capacity to the market and ensuring the grid capacity to transport or distribute to the customer. This is an important sustainability issue since electricity is an essential service for socio-economic stability. Daily lives are increasingly dependent on electricity, which is key for enabling access to many technologies and services.

This DMA is closely linked to EU10 which describes the planned capacity (in MW) against projected electricity demand.

2. Compilation

2.1 Identify approaches to assess key challenges related to meeting the balance of supply and demand (e.g. timing of investments) or market needs. These approaches can include scenario planning or alternatives analysis (e.g. Integrated Resource Planning) to evaluate different sites, technologies and social, environmental, regulatory and economic implications.

2.2 Report management approaches to address each challenge. These approaches can include:

- Short and long-term maintenance practices;
- Peak load management, such as orderly planned interruptible supply agreements to ensure electricity supply.
- Investment or divestment in generation, transmission and distribution and demand management, (e.g. maintain reserve levels, smart grids).

3. Definitions

None.

4. Documentation

Resource planning department, operations and distribution services and public records/information.

5. References

None.

Indicators

EU10

PLANNED CAPACITY AGAINST PROJECTED ELECTRICITY DEMAND OVER THE LONG TERM, BROKEN DOWN BY ENERGY SOURCE AND REGULATORY REGIME

1. Relevance

This indicator provides information on the utility's planned electricity capacity and its projected future energy requirements. It aims to show whether the reporting organization is planning to install enough energy capacity to meet future demand. There are utilities in certain markets which are not involved in planning and therefore are not expected to report on this indicator.

This indicator is closely linked to the DMA 'Management approach to ensure short and long-term electricity availability and reliability' (former EU6) which describes the planning processes in place to ensure availability and reliability of supply.

2. Compilation

2.1 Calculate planned capacity in MW, including purchased power and reserve margins, for each regulatory regime broken down by both energy source and by:

- Capacity under construction
- Planned future investments including commitments made by the utility

This should factor in, for example, new plants, retrofitting, upgrading, mothballing, decommissioning or efficiency improvements and energy storage. It should describe changes to net capacity.

2.2 Identify uncertainties of planned capacity and/or any constraints, for example, the intermittency of wind generation. Information should be reported by regulatory regime.

2.3 Report the comparison of planned capacity against projected demand over the same time period.

2.4 Report the results of 2.1

3. Definitions

Primary Source

The initial form of energy consumed to satisfy the reporting organization's energy demand. This energy is used either to provide final energy services (e.g., space heating, transport) or to produce intermediate forms of energy, such as electricity and heat. Examples of primary energy include non-renewable sources such as coal, natural gas, oil, and nuclear energy. It also includes renewable sources such as biomass, solar, wind, geothermal, and hydro energy. Primary energy might be consumed on-site (e.g., natural gas to heat the reporting organization's buildings) or off-site (e.g., natural gas consumed by the power plants that provide electricity to the reporting organization's facilities).

Regulatory Regime

Regulatory regime refers to local, sub-national, national or regional area where there is a common regulatory framework.

Capacity

Capacity is the maximum amount of power, in MW, that an entity can produce. Utilities are asked to report net capacity, i.e. maximum capacity a power station is designed to deliver to the grid. Internal use of electricity for auxiliary systems is excluded.

4. Documentation

None.

5. References

None.

Sector specific Aspect: Demand-Side Management

GUIDANCE - DISCLOSURES ON MANAGEMENT APPROACH

Demand-side management programs including residential, commercial, institutional and industrial programs (former EU7)

1. Relevance

The primary objective of most demand-side management (DSM) programs is to provide cost-effective energy and capacity resources to help defer the need for new sources of power, including generating facilities, power purchases, and transmission and distribution capacity additions. Some electric utilities are also using DSM as a way to enhance customer service and demonstrate action on climate change.

2. Compilation

2.1 Programs will involve different forms of interaction between the utility and the customer. For example, the interaction could be based on provision of advisory services, energy-saving equipment, or tariff incentives or it could be based on the customer receiving information such as educational brochures.

2.2 Identify demand side management initiatives in terms of:

- Investments;
- Program objectives;
- Methodology used to monitor and evaluate programs
- Initiatives mandated and incentivized by government; and
- Results identified including MWh saved or MW load shifted and underlying assumptions.

DSM covers the complete range of load-shaped objectives, including strategic conservation and load management, as well as strategic load growth. It refers to any energy and load-shape modifying activities in response to utility-administered programs.

2.3 Report separately on demand-side programs and broken down by:

- Residential;
- Commercial;
- Institutional (e.g. government, health, nonprofits); and
- Industrial customers.

3. Definitions

Demand-Side Management

The planning, implementation and monitoring of utility activities designed to encourage customers to modify patterns of electricity usage is called Demand Side Management (DSM). DSM affects the timing and level of electricity demand by encouraging the use of energy efficient devices and enhanced customer behaviour to reduce demand and waste of energy.

4. Documentation

This information may come from regulatory filings by regulatory regime and project information. For deregulated markets information can be derived from operational information or agreements with customers.

5. References

None.

Sector specific Aspect: Research and Development

GUIDANCE - DISCLOSURES ON MANAGEMENT APPROACH

Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development (former EU8)

1. Relevance

Research and development into providing reliable and sustainable electricity is an important part of today's energy landscape. In particular, it is important that energy utilities find new, more sustainable ways of providing energy.

2. Compilation

2.1 Report Research and Development (R&D) activities in areas of direct expenditures and research collaboration. Provide a breakdown of R&D expenditure, drawing particular attention to categories relating to sustainable development. These categories might include:

- Energy efficiency;
- Renewable energy technologies;
- Distributed energy;
- Transmission and distribution technologies e.g. smart grids and micro grids;
- Advanced generation and technologies, e.g. carbon capture storage; and
- Innovative sustainability related services e.g. smart metering.

2.2 Report how these research and development activities are related to disclosures under EU5 and indicators associated with access to electricity.

3. Definitions

None.

4. Documentation

Potential information sources include R&D department, financial department, and embedded R&D functions within business units.

5. References

None.

Sector specific Aspect: Plant Decommissioning

GUIDANCE - DISCLOSURES ON MANAGEMENT APPROACH

Provisions for decommissioning of nuclear power sites (former EU9)

1. Relevance

With new nuclear power sites coming on line and old sites being decommissioned it is essential that those energy utilities concerned have provisions in place for the safe decommissioning of their sites. This DMA provides information on the reporting organization's means for decommissioning nuclear power sites. It ensures that the reporting organization has plans in place for the decommissioning of its sites and that they are carried out in a safe and secure manner that complies with international regulations. The DMA 'Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development' (former EU8) applies to electric utilities with existing or planned nuclear assets.

2. Compilation

2.1 Identify the discount rate and other financial assumptions used to report the provisions to give context to the estimated costs.

2.2 Identify how the decommissioning will be funded.

2.3 Identify how the relevant regulatory regime influences this issue.

2.4 Identify the schedule of activities and progress.

2.5 Report provisions, including estimated cost for closure and decommissioning of plants, and for site decontamination and restoration.

3. Definitions

Decommissioning of nuclear power sites

Decommissioning involves a clean-up of all radioactive and any other harmful material and a progressive demolition of the plant.

4. Documentation

The financial statements will include details of costs, including the discount rates used.

5. References

- IAEA Safety Glossary, 2007 Edition

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1290_web.pdf provides examples of provisions.

Sector specific Aspect: System Efficiency

Indicators

EU11

AVERAGE GENERATION EFFICIENCY OF THERMAL PLANTS BY ENERGY SOURCE AND BY REGULATORY REGIME

1. Relevance

Improved operational efficiency contributes towards sustainable development through cost reduction and emissions reduction. It can also influence national energy security. Improvements in generation efficiency reduce the volumes of oil/gas and other fuel required for electricity and useful heat generation and reduces emissions.

2. Compilation

2.1 Indicate assumptions and confidence level of the figures reported for this indicator.

2.2 Identify overall efficiency (electricity sent-out + heat supplied/ energy input), in addition to electricity efficiency, if operating a combined heat and power plant.

2.3 Report the average annual efficiency of the fleet by energy source and by regulatory regime. Express the net efficiency as a percentage (electricity sent-out/energy input).

3. Definitions

Primary Source

The initial form of energy consumed to satisfy the reporting organization's energy demand. This energy is used either to provide final energy services (e.g., space heating, transport) or to produce intermediate forms of energy, such as electricity and heat. Examples of primary energy include non-renewable sources such as coal, natural gas, oil, and nuclear energy. It also includes renewable sources such as biomass, solar, wind, geothermal, and hydro energy. Primary energy might be consumed on-site (e.g., natural gas to heat the reporting organization's buildings) or off-site (e.g., natural gas consumed by the power plants that provide electricity to the reporting organization's facilities).

Thermal plants

Thermal plants are power plants fueled by hydrocarbon energy sources.

Generation efficiency

Generation efficiency is the ratio of gross energy going into a plant against the net energy (electricity, and if CHP, heat) supplied.

Regulatory regime

Regulatory regime refers to local, sub-national, national or regional area where there is a common regulatory framework.

4. Documentation

Plant manuals, engineering and operational reports.

5. References

None.

EU12

TRANSMISSION AND DISTRIBUTION LOSSES AS A PERCENTAGE OF TOTAL ENERGY

1. Relevance

Information on transmission and distribution efficiency captures information on technical and non-technical losses (including unauthorized connections). Losses can increase costs to consumers, increase emissions intensity and provide an indication that there are illegal connections. Illegal connections can be linked to public health and safety. Year-on-year reporting will enable companies and their stakeholders to see variation in losses and identify where improvements can be made.

2. Compilation

2.1 For distribution efficiency differentiate between technical and non-technical losses, and describe key assumptions of the estimates.

2.2 Report transmission and distribution losses separately. Losses are measured as energy lost / energy entering the system over a one year period.

3. Definitions

Transmission

Transmission is the process of transferring electrical power from power stations to substations.

Distribution

Distribution is the process of transferring electrical power from substations to customers.

4. Documentation

None.

5. References

None.

CATEGORY: ENVIRONMENTAL

G4 Aspect: Biodiversity

Indicators

EU13

BIODIVERSITY OF OFFSET HABITATS COMPARED TO THE BIODIVERSITY OF THE AFFECTED AREAS

1. Relevance

The presence of electricity utility infrastructure can result in impacts on biodiversity which may not be readily mitigated. Wildlife habitats can be adversely affected when utility infrastructure (e.g. power plants, wind farms, transmission lines, dams) are installed. One solution to this impact is the concept of offset habitats. This indicator describes the extent to which the biodiversity in offset habitats compares with the original habitat. Offsets are being commonly employed and standards are currently being developed. This indicator is particularly relevant to organizations that have activities in sensitive natural habitats. Additional measures related to biodiversity conservation are captured in G4-EN11 to G4-EN14.

2. Compilation

This indicator compares offset habitats with original habitats, described by G4-EN12 identified for offsetting.

2.1 Identify biodiversity of offset habitat in terms of:
- Area (km^2) of habitats;
- Major species conserved / protected; and
- Habitat description (e.g. wetland, grassland, forest, etc).

2.2 Compare biodiversity of original habitat before company activities take place, with the biodiversity of the offset habitat using information collected in G4-EN12.

2.3 Explain the reason for the differences between the original and offset habitats and describe any work being done to improve the biodiversity of the offset habitat.

2.4 Report the period for monitoring and reporting biodiversity at offset sites.

2.5 Report the results of 2.2

3. Definitions

Offset Habitat

An offset habitat is an area specifically designated to replace land or a water body where biodiversity has been adversely affected by the presence of utility activities.

4. Documentation

Environmental management plans in Environmental Impact Assessment relating to construction and operation of plant, Voluntary action plans related to biodiversity conservation, and Regulatory guidelines.

5. References

- G4-EN11, G4-EN12, and G4-EN14, *G4 Implementation Manual* pp. 101, 102 and 104
- IUCN Red List of Threatened Species

CATEGORY: SOCIAL

SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK

G4 Aspect: Employment

GUIDANCE - DISCLOSURES ON MANAGEMENT APPROACH

Programs and processes to ensure the availability of a skilled workforce (former EU14)

1. Relevance

The operation of electrical utilities relies on large numbers of highly skilled workers. These workers are called upon to perform highly technical tasks which require specialized skills, and mental and physical readiness. Maintaining a highly skilled workforce is essential to the sustainability and reliability of the utility's services upon which societies depend, and to ensure the safety of the workforce, equipment and operations, and the community. Often, the training (both formal and on-the-job) required to perform these jobs take years to acquire, therefore staff vacancies cannot be quickly or easily filled.

Key issues include workforce retention, renewal and expansion. This is particularly important because of the global shortage and uneven demographic (including an aging of workforce) and geographic distribution of skills. Indeed in some cases, well-trained workers from less developed countries are often attracted to more industrialised countries to the detriment of their country of origin.

Diversity is a key aspect of providing a skilled workforce as it widens the pool of potential talent available to electric utilities.

2. Compilation

2.1 Report programs and processes including:

- Program to assess skills needed in the workforce;
- Training programmes including apprenticeship programs for new workers and specialized training on existing and new technologies for existing workers;
- Ongoing higher education for qualified technical workers, for example electrical and mechanical engineers;
- Training partnerships between utility and technical institutions to develop capacity;
- The development of local employees when a utility is operating outside its national borders;
- Programs to source workers from beyond national boundaries and country of origin recruitment policies and consideration of impact to the home country; and
- Programs to attract and retain employees and include a reference to diversity including gender and race.

3. Definitions

None.

4. Documentation

This information can be obtained from Human Resources department.

5. References

None.

Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors (former EU16)

1. Relevance

Given that contractor and subcontractor employees may engage in high-risk activities, reporting organizations are expected to ensure that they are trained on health and safety issues (e.g. electrocution, falling objects, confined spaces, containers, etc) for their own protection. It is important to report on contractors and subcontractors since there is a trend in the electricity utility sector towards outsourcing work to third parties.

This DMA does not directly address health and safety of the communities served, but relevant health and safety training of workers indirectly ensures health and safety of the surrounding communities.

2. Compilation

2.1 Identify policies on employee classification given health and safety training (e.g. employees, employees of contractors and subcontractors, office staff, plant workers, field workers, etc).

2.2 Identify requirements of training provided (e.g. onsite, offsite, formal, informal, internal training, provided by external organisation, etc).

2.3 Identify policies and requirements on health and safety programs to provide equipment for employees of all classes and the employees of contractors and subcontractors.

2.4 Report the policies and requirements, including monitoring and compliance systems in place related to health and safety training of employees and employees of contractors and subcontractors.

3. Definitions

See definitions of 'Contractors', 'Sub-contractors' and 'Independent contractors' in the *G4 Implementation Manual* p. 253.

4. Documentation

This information can be obtained from Human Resources departments.

5. References

None.

Indicators

EU15

PERCENTAGE OF EMPLOYEES ELIGIBLE TO RETIRE IN THE NEXT 5 AND 10 YEARS BROKEN DOWN BY JOB CATEGORY AND BY REGION

1. Relevance

Due to the critical nature of the Electric Utility industry and the fact that training in production, maintenance and distribution classifications can require as much as seven years, it is important for workforce planning purposes to assess how much of the workforce may be eligible for retirement in the foreseeable future. Furthermore, once employees become eligible for retirement, whatever their age, they become more vulnerable to recruitment by competitors in the industry.

2. Compilation

2.1 Identify assumptions around eligibility to retire by region.

2.2 Identify job categories, these could include:

- Line workers and splicers;
- Power plant operators;
- Engineers; and
- Maintenance mechanics.

2.3 Report the actual or estimated percentage of employees eligible to retire over the next 5 and 10 year periods broken down by category and region.

3. Definitions

None.

4. Documentation

Human resources department.

5. References

None.

EU17

DAYS WORKED BY CONTRACTOR AND SUBCONTRACTOR EMPLOYEES INVOLVED IN CONSTRUCTION, OPERATION & MAINTENANCE ACTIVITIES

1. Relevance

Electric utility companies sometimes employ contractors and subcontractors to carry out work for either economic reasons, to cover peak demand (i.e. during maintenance), due to lack of available staff or a lack of particular skill sets. A reliance on contractors and subcontractors can result in issues related to:

- Lack of management control of high risk activities;
- Safety of contractor and subcontractor employees; and
- Reliability of operations.

Construction, maintenance and operation activities are important for electricity utility companies.

They are most likely to impact on the reliability of service and also present the highest risk to safety of employees and society. This indicator describes the reliance of the reporting organization on contractors and subcontractors.

2. Compilation

2.1 Identify and state which jobs are performed by contractors and subcontractors, for example:

- Distribution and transmission line worker;
- Splicer;
- Substation operators and mechanics;
- Operators and auxiliary operators;
- Plant Mechanic (incl. Nuclear plant mechanics);
- Welders;
- Machinists;
- Technicians;
- Engineer; and
- Electrician.

2.2 Report an estimate, based on the contract terms or actual time worked, full time equivalent days worked by contractor and subcontractor employees on electric utility systems, (generation, distribution, transmission) broken down by:

- Construction activities;
- Operation activities; and
- Maintenance activities.

3. Definitions

See definitions of 'Contractors', 'Sub-contractors' and 'Independent contractors' in the *G4 Implementation Manual* p. 253.

Full Time Equivalent Days

'Full time equivalent days' is defined as the total number of hours worked by employees of contractors and subcontractors in a calendar year divided by 8.

4. Documentation

Human Resources Department.

5. References

- G4-10, *G4 Implementation Manual* pp. 26-27

EU18

PERCENTAGE OF CONTRACTOR AND SUBCONTRACTOR EMPLOYEES THAT HAVE UNDERGONE RELEVANT HEALTH AND SAFETY TRAINING

1. Relevance

This indicator reports specifically on health and safety training for contractor and subcontractor employees. This is one element of health and safety management, G4-LA6 gives more information on reporting topics around rates of injuries.

Given that contractor and subcontractor employees may engage in high-risk activities, reporting organizations are expected to ensure that they are trained on health and safety issues (e.g., electrocution, falling objects, confined spaces, containers, etc) for their own protection.

This indicator does not directly address health and safety of the communities served, but relevant health and safety training of workers indirectly ensures health and safety of the surrounding communities.

2. Compilation

2.1 Training programmes reported in this section should be equivalent to the training that the electric utility gives its own employees, or that meets national international or industry standards.

2.2 Report the total number of contractor and subcontractor employees (broken into the categories given in EU17 Section 2.1) that have undergone health and safety training.

2.3 Report this value as a percentage of the total number of contractor employees and subcontractor employees (including independent contractor) in each category.

3. Definitions

See definitions of 'Contractors', 'Sub-contractors' and 'Independent contractors' in the *G4 Implementation Manual* p. 253.

4. Documentation

Information may be obtained through Human Resources department; management information systems, health and safety department, safety audit results, procurement department.

5. References

None.

SUB-CATEGORY: SOCIETY

G4 Aspect: Local Communities

GUIDANCE - DISCLOSURES ON MANAGEMENT APPROACH

Stakeholder participation in decision making processes related to energy planning and infrastructure development (former EU19)

1. Relevance

Most electric utility markets are made up of a few large players or monopolies. At the same time, there is more direct public sector involvement in the management of supply and demand. Decisions that might be market-driven in other sectors, are not always so in the electricity sector, due to the physical nature of electricity and the demands of maintaining a stable electricity system for vital services to the population.

Electric utilities actively engage in discussions around general public policy issues (e.g., public health) and this is addressed by the DMA Guidance for the Public Policy Aspect (*G4 Implementation Manual* p. 209). Electric utilities also provide a particularly important input into planning process around energy strategies and infrastructure development given their role as providers of the service. The nature of this engagement and the level transparency afforded to stakeholders varies significantly.

This DMA addresses the process by which a utility develops its inputs and proposals regarding energy planning and infrastructure development and involves civil society organizations in such a process.

2. Compilation

2.1 Identify the earliest point at which informed stakeholder inputs are requested and inputs are obtained including before decisions are taken. Decisions include, but are not limited to, resource planning, proposals for the siting of facilities and transmission lines, and changes to customer programs.

2.2 Energy planning and infrastructure development covers a range of policy decisions related to areas such as:
- Energy demand projections;
- Energy sources and technologies;
- Site planning and displacement;
- Rate and tariff setting;
- Climate change and environmental impacts; and
- Others.

2.3 Identify the range of policy decisions where the reporting organization is active. This may relate to international, national or regional policy or planning or to the development of specific projects or infrastructure.

2.4 Identify the type of authorities which are engaged. These may be local regulators, governments, public agencies or commissions, etc.

2.5 Identify civil society organizations, which are engaged. These may be community associations, NGOs, worker organizations, citizen groups, etc.

2.6 Report processes project by project regarding the involvement of stakeholders in the decision making process regarding energy planning and development, in terms of:
- Groups to be informed and consulted;
- Points in the decision-making process for consultation;
- How early in the decision-making process stakeholders are engaged;
- Management level within the organization responsible for the consultation;
- Information and resources provided to support participation process (including measures to ensure vulnerable stakeholders are informed, engaged and empowered); and
- The channels through which stakeholder participation occurs.

The organization should state how the consultation process varies depending on factors such as the type of policy or infrastructure in question or the regulatory regime.

3. Definitions

Participation

Criteria for participation may include: ability to influence decisions through timely access to relevant material and mechanisms for systematic input. Degree of participation will range from information sharing, through consultation to shared decision making.

FORMER EU19 CONTINUED

Stakeholders
See definition of 'Stakeholders' in the *G4 Implementation Manual* p. 244.

4. Documentation
Potential information sources include organizational policies and procedures, results of data collection from environmental and community programs, and analysis results of external stakeholder forums, joint community committees, stakeholder reports, and other inputs. Both internal and external sources and references should be used.

5. References
Refer to the World Bank definition of vulnerability in the World Bank Glossary of Key Terms available online at *http://www.worldbank.org/*.

Approach to managing the impacts of displacement (former EU20)

1. Relevance

The construction or expansion of electricity utility infrastructure can result in the displacement of local residents. Affected people can experience loss of livelihoods, breakdown of social networks, and loss of access, among other impacts.

It is also recognized that other players (e.g. governments, banks, etc.) are responsible for displacements, in addition to Electric Utilities.

2. Compilation

2.1 Report the approach taken by the reporting organization, including:

- Identification of affected people;
- The legal context and the approach taken to address involuntary and consensual physical and economic displacement;
- Assessment of psychological and social impacts to individuals and communities affected;
- Discussion of how the organization is looking to avoid displacement and how alternatives are being considered;
- Nature of consultation, e.g., formal role of local people in consultation and participation in decision-making processes;
- Preparation of resettlement plan and budget within a specific timeframe, and mechanisms to evaluate implementation;
- Compensation and other assistance for resettlement including comparison with prior living standards;
- Grievance mechanisms to address concerns about compensation and relocation or resettlement;
- Programs for communities to ensure their social and cultural identities are protected, this is particularly important for indigenous peoples; and
- Describe which players (e.g. governments, banks, etc.) the organization is working with and how responsibilities relating to displacement are shared.

3. Definitions

Compensation

Compensation could include cash compensation, replacement housing, land, or commercial sites (e.g. shops), and additional support such as infrastructure in new resettlement sites, training, credit and job opportunities.

Involuntary Displacement

Physical displacement can be defined as relocation or loss of shelter. Economic displacement means loss of assets or access to assets which results in loss of means of livelihood. Involuntary means that the displacement is against the will of those displaced.

4. Documentation

Legal department, planning department.

5. References

None.

Indicators

EU22

NUMBER OF PEOPLE PHYSICALLY OR ECONOMICALLY DISPLACED AND COMPENSATION, BROKEN DOWN BY TYPE OF PROJECT

1. Relevance

Electric utility sites invariably have an impact on the local population and new or expansion projects can result in their displacement. Both physical and economic displacement can result in a deterioration of quality of life. This indicator will report the number of people displaced by new or expansion projects and it will highlight the impact the reporting organization has had on the local community. The indicator will help to ensure transparency surrounding the impacts of the electric utility on the community. The DMA 'Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans' (former EU21), aims to address displacements related to large scale projects.

2. Compilation

2.1 Identify number of people physically and economically displaced by large projects broken down by type of project (e.g. plant expansion, new plant, new transmission lines).

2.2 Report on the number of people compensated including those that may be affected positively (e.g. access to electricity, new job opportunities).

2.3 Report the number of people physically or economically displaced, broken down by type of project. Report on the number of people compensated (e.g. access to electricity, new job opportunities).

3. Definitions

Displacement

Physical displacement can be defined as relocation or loss of shelter. Economic displacement means loss of assets or access to assets, which results in loss of means of livelihood.

4. Documentation

Legal department, planning department.

5. References

None.

Sector specific Aspect: Disaster/Emergency Planning and Response

GUIDANCE - DISCLOSURES ON MANAGEMENT APPROACH

Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans (former EU21)

1. Relevance

The infrastructure of most electric utilities presents potential hazards, which can have serious impacts. Examples of concerns include major accidents, natural disasters and terrorist attacks. These require contingency planning measures, disaster/emergency management plans and training programs, and recovery/restoration plans. A major incident can not only threaten the lives of surrounding communities but also leave a region without service and the company with high restoration costs.

This DMA is particularly relevant to nuclear and large scale hydro power generation, but it is applicable across the sector. This DMA describes the disaster/ emergency management and recovery/restoration plans the reporting organization has in place. In many cases these plans are developed in cooperation with regional or national government.

2. Compilation

2.1 Report approach to:

- Key event risks and assumptions;
- On-site and off-site emergency planning;
- On-site and off-site communication;
- Emergency plan testing;
- Approval by external parties (e.g. public authorities or regulators);
- Training and preparedness measures for employees, contractors, subcontractors; and
- Adherence to specific regulatory requirements, performance standards, and/or codes of practice.

The organizational approach described should include short and long-term management responses. This should include the legal framework underpinning emergency plans and describe areas where security issues prevent full disclosure.

2.2 Report the approach for the restoration of power and other essential services.

2.3 Report how the community, authorities and industrial customers are involved in the development and implementation of these plans.

2.4 Report where this information is publically available for each facility.

3. Definitions

Major Accidents

Major accidents are exceptional events which occur very infrequently and have a high significant impact.

4. Documentation

Report to regulatory authorities.

5. References

None.

SUB-CATEGORY: PRODUCT RESPONSIBILITY

G4 Aspect: Customer Health and Safety

Indicators

EU25

NUMBER OF INJURIES AND FATALITIES TO THE PUBLIC INVOLVING COMPANY ASSETS INCLUDING LEGAL JUDGMENTS, SETTLEMENTS AND PENDING LEGAL CASES OF DISEASES

1. Relevance

Activities of electric utilities and electricity itself can sometimes be associated with public injuries, diseases or fatalities. This indicator helps the reporting organization to be transparent around the health impact it has on the society and indicates the reporting organization's commitment to health and safety of the public.

2. Compilation

2.1 Report the number of individuals affected by injuries and fatalities involving company assets.

2.2 Report the annual number of health and safety related legal cases (resolved and pending), including diseases and judgments affecting members of the public and the potential risks associated with these cases.

3. Definitions

Resolved and pending cases

Resolved and legally pending cases of diseases refer to cases that have been taken to court and have been filed publicly.

4. Documentation

Legal and Health and Safety Departments.

5. References

None.

Sector specific Aspect: Access

GUIDANCE - DISCLOSURES ON MANAGEMENT APPROACH

Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services (former EU23)

1. Relevance

Electricity supply is a basic necessity whether supplied on- or off-grid. It is key for enabling access to many other technologies and services. Programs to improve access to electricity can deliver significant improvements to the standard of living for individuals and communities.

2. Compilation

2.1 The purpose of this DMA is to report the programs which provide and improve access to electricity and which help to avoid disconnections for residential customers.

2.2 Report programs specifically targeting low income or vulnerable customers and communities which aim to improve access to electricity. The reporting organization should explain how it defines 'low income' or 'vulnerable' customers and how it identifies which of its customers are in this category.

Programs to be reported will aim to prevent disconnections and debt for low income or vulnerable customers. It should be clear which programs are supported by public funds. Examples of the sort of programs to report are:

- Subsidized payment of bills;
- Special rates;
- Helping with payment arrangements;
- Energy saving to lower payments;
- Programs for remote off-grid populations;
- Programs to ensure universal access to electricity within licensed distribution or service areas;
- Formalizing unauthorized connections;
- Helping people who have been disconnected to get reconnected; and
- Intermediary help by local health services.

This disclosure should not include programs covered by the DMA 'Practices to address language, cultural, low literacy and disability related barriers to access and safely use electricity and customer support services' (former EU24) or by more general maintenance and expansion programs of electrical systems.

3. Definitions

Access

Access is defined as the ability to use an affordable, reliable and unrestricted electricity supply. People can be denied access to electricity for a number of reasons, including but not limited to geographic isolation and/or financial poverty.

4. Documentation

Commercial, Customer Services, and Billing/Marketing departments.

5. References

None.

Indicators

EU26

PERCENTAGE OF POPULATION UNSERVED IN LICENSED DISTRIBUTION OR SERVICE AREAS

1. Relevance

It is universally accepted that electricity improves quality of life. This indicator provides a measure of the extent of electricification. There are cases when a percentage of the population is not provided with electricity even though they are in a distribution area. Reasons for this can include poor transmission or distribution infrastructure and widely distributed and/or isolated populations.

This indicator is intended to be reported by organizations with distribution operations.

2. Compilation

2.1 Identify areas and population within licensed distribution area where a distribution network or off-grid alternatives are absent, by rural and urban areas. Provide assumptions for estimating overall and unserved population.

2.2 Report estimated percentage of population unserved based on total population within licensed distribution or service area.

3. Definitions

Licensed Distribution Areas

Licensed distribution areas contain networks, owned/operated by licensed operators, which carry electricity to the customer in which the operator has the concession or monopoly.

Unserved population

Those who live in an area where electricity infrastructure is not available.

4. Documentation

Census documentation, number of residential accounts, grid coverage data.

5. References

None.

EU27

NUMBER OF RESIDENTIAL DISCONNECTIONS FOR NON-PAYMENT, BROKEN DOWN BY DURATION OF DISCONNECTION AND BY REGULATORY REGIME

1. Relevance

There are cases when people do not pay for their residential electricity for a variety of different reasons. In such cases electricity companies may disconnect those customers from the grid until the arrangements for the payment have been made.

The length of time a household is without electricity, as well as the speed at which electric utilities reconnect following payment arrangements, can have a significant impact on health, safety and/or standards of living.

2. Compilation

2.1 Report number of customers broken down by total length of time between disconnection and arrangement of payment following five categories: <48 hours, 48 hours – 1 week, 1 week – 1 month, 1month – 1 year, >1year.

2.2 Report number of customers broken down by total length of time between arrangement of payment and reconnection following three categories: <24 hours, 24hours – 1 week, >week.

3. Definitions

Regulatory Regime

A regulatory regime is defined as a local, sub-national, national or regional area where there is a common regulatory framework.

4. Documentation

None.

5. References

None.

EU28

POWER OUTAGE FREQUENCY

1. Relevance

An electric utility should provide quality service with uninterrupted power supply and consistent voltage. In some cases, electricity cannot be provided continuously and power outages can occur.

2. Compilation

2.1 Refer to IEEE Standard 1366-2003 for compilation details.

2.2 Report System Average Interruption Frequency Index (SAIFI) over the course of the year.

3. Definitions

System Average Interruption Frequency Index (SAIFI)

SAIFI is the average number of interruptions that a customer would experience and is measured in units of interruptions per customer. It demonstrates the reliability of the reporting organization's supply.

SAIFI = (total number of customer interruptions) / (total number of customers served).

It is usually measured over the course of a year.

Power Outage

A power outage (also known as a power cut, power failure, power loss, blackout or interruption) is the loss of electricity supply to an area.

4. Documentation

None.

5. References

- IEEE Standard 1366-2003.

EU29

AVERAGE POWER OUTAGE DURATION

1. Relevance

This indicator is linked to EU28. An electric utility should provide quality service with uninterrupted power supply and consistent voltage. In some cases, electricity cannot be provided continuously and power outages can occur. Duration demonstrates the ability of a utility to restore power in a timely manner.

2. Compilation

2.1 Refer to IEEE Standard 1366-2003 for compilation details.

2.2 Report System Average Interruption Duration Index (SAIDI) over the course of the year.

3. Definitions

System Average Interruption Duration Index (SAIDI)

SAIDI is the average outage duration for each customer served, and is measured in units of time, often minutes or hours.

SAIDI = (sum of all customer interruption duration) / (total number of customers served).

It is usually measured over the course of a year.

Power Outage

A power outage (also known as a power cut, power failure, power loss, blackout or interruption) is the loss of the electricity supply to an area.

Duration

Duration refers to the period of time between the beginning of the interruption and the return of the electricity supply.

4. Documentation

None.

5. References

- IEEE Standard 1366-2003.

EU30

EU30 AVERAGE PLANT AVAILABILITY FACTOR BY ENERGY SOURCE AND BY REGULATORY REGIME

1. Relevance

Generation plants do not operate all the time because planned and unplanned outages occur. These outages can result from maintenance and operational issues. Unplanned outages have financial implications since preferred generation capacity is often replaced by less efficient and more expensive plant.

2. Compilation

2.1 Identify the number of hours of planned outage (An outage scheduled well in advance (at least two weeks) of the actual outage).

2.2 Identify number of hours of forced outage (Unplanned outage that requires the plant to be taken out of service immediately or before the next planned outage).

2.3 Report the average availability factor by energy source and by regulatory regime.

3. Definitions

Availability Factor

The availability factor of a power plant is the amount of time that it is able to produce electricity over a certain period, divided by the amount of the time in the period. Occasions where only partial capacity is available may or may not be deducted. The availability factor should not be confused with the capacity factor. Availability factor (%) = (Total hours of plant in operation during the period x 100) / Total length of period (hours).

4. Documentation

Operations department.

5. References

- International Geothermal Association.

Sector specific Aspect: Provision of Information

GUIDANCE - DISCLOSURES ON MANAGEMENT APPROACH

Practices to address language, cultural, low literacy and disability related barriers to access and safely use electricity and customer support services (former EU24)

1. Relevance

Provision of information is essential to ensure consumers have access to electricity delivering significant improvements to their standard of living.

Electricity and electric power generation can be lethal if not handled/generated/used in a safe manner. Electric utilities need to communicate the dangers associated with their operations and the measures in place to prevent customers being harmed.

In some areas where the primary national language may not be the dominant language, organizations should ensure that all literature, signage, labeling and communication are in a language which can be understood by all. Similarly people with disabilities should be considered when the organization communicates important customer related or health and safety information.

2. Compilation

2.1 Report programs in place to ensure that language barriers and/or disabilities do not impede the effective communication of important customer-related or health and safety information. These may include:

- Multi-lingual billing information;
- Billing information available in Braille or audio versions;
- Multi-lingual customer support; and
- Multi-lingual signage, labeling, safety warnings.

2.2 Report any programs or specific practices which help to warn people about the dangers of electricity and educate people about safe electricity use.

3. Definitions

None.

4. Documentation

Communications, Commercial, Customer Operations/ Customer Services, and Marketing Departments.

5. References

None.

5 ANNEX I OVERVIEW OF LINKS WITH THE ELECTRIC UTILITIES SECTOR SUPPLEMENT

Annex I provides an overview of how the Electric Utilities Sector Supplement (2009) contents have been re-organized to fit the new structure of the G4 Guidelines and includes references to the original contents' location in the Sector Supplement.

Legend:
The following references correspond to the different chapters of the *G3 Electric Utilities Sector Supplement* as follows:

- RG & EUSS ➔ Sustainability Reporting Guidelines & Electric Utilities Sector Supplement
- IP: EC & EUSS ➔ Indicator Protocols Set Economic (EC)
- IP: EN & EUSS ➔ Indicator Protocols Set Environment (EN)
- IP: LA & EUSS ➔ Indicator Protocols Set Labor Practices and Decent Work (LA)
- IP: HR & EUSS ➔ Indicator Protocols Set Human Rights (HR)
- IP: SO & EUSS ➔ Indicator Protocols Set Society (SO)
- IP: PR & EUSS ➔ Indicator Protocols Set Product Responsibility (PR)

GENERAL STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR

GENERAL STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Section	**Original location of the Sector Disclosures in the Sector Supplement (2009)**
Organizational Profile	**SECTOR ADDITIONS TO G4 GENERAL STANDARD DISCLOSURES** **G4-10** **Additional disclosure requirements** See Sector Supplement IP: LA & EUSS, p. 8 **Additional Guidance** See Sector Supplement IP: LA & EUSS, p. 9 **G4-11** **Additional disclosure requirements** See Sector Supplement IP: LA & EUSS, p. 14 **Additional Guidance** See Sector Supplement IP: LA & EUSS, p. 14

GENERAL STANDARD DISCLOSURES FOR THE SECTOR CONTINUED

GENERAL STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Section	**Original location of the Sector Disclosures in the Sector Supplement (2009)**
Organizational Profile (cont.)	**SECTOR SPECIFIC GENERAL STANDARD DISCLOSURES** EU1 **INSTALLED CAPACITY, BROKEN DOWN BY PRIMARY ENERGY SOURCE AND BY REGULATORY REGIME** See Sector Supplement RG & EUSS, p. 32 EU2 **NET ENERGY OUTPUT BROKEN DOWN BY PRIMARY ENERGY SOURCE AND BY REGULATORY REGIME** See Sector Supplement RG & EUSS, p. 32 EU3 **NUMBER OF RESIDENTIAL, INDUSTRIAL, INSTITUTIONAL AND COMMERCIAL CUSTOMER ACCOUNTS** See Sector Supplement RG & EUSS, p. 33 EU4 **LENGTH OF ABOVE AND UNDERGROUND TRANSMISSION AND DISTRIBUTION LINES BY REGULATORY REGIME** See Sector Supplement RG & EUSS, pp. 33-34 EU5 **ALLOCATION OF CO_2E EMISSIONS ALLOWANCES OR EQUIVALENT, BROKEN DOWN BY CARBON TRADING FRAMEWORK** See Sector Supplement RG & EUSS, p. 34

SPECIFIC STANDARD DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR

CATEGORY: ECONOMIC

ECONOMIC DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Original location of the Sector Disclosures in the Sector Supplement (2009)**
Sector specific Aspects	
Availability and Reliability	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Management approach to ensure short and long-term electricity availability and reliability (former EU6) See Sector Supplement IP: EC & EUSS, p. 4
	SECTOR SPECIFIC INDICATORS EU10 **PLANNED CAPACITY AGAINST PROJECTED ELECTRICITY DEMAND OVER THE LONG TERM, BROKEN DOWN BY ENERGY SOURCE AND REGULATORY REGIME** See Sector Supplement IP: EC & EUSS, p. 18
Demand-Side Management	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Demand-side management programs including residential, commercial, institutional and industrial programs (former EU7) See Sector Supplement IP: EC & EUSS, p. 5
Research and Development	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development (former EU8) See Sector Supplement IP: EC & EUSS, p. 6
Plant Decommissioning	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Provisions for decommissioning of nuclear power sites (former EU9) See Sector Supplement IP: EC & EUSS, p. 7

ECONOMIC DISCLOSURES FOR THE SECTOR CONTINUED

ECONOMIC DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Original location of the Sector Disclosures in the Sector Supplement (2009)**
Sector specific Aspects	
System Efficiency	**SECTOR SPECIFIC INDICATORS** EU11 **AVERAGE GENERATION EFFICIENCY OF THERMAL PLANTS BY ENERGY SOURCE AND BY REGULATORY REGIME** See Sector Supplement IP: EC & EUSS, p. 19 EU12 **TRANSMISSION AND DISTRIBUTION LOSSES AS A PERCENTAGE OF TOTAL ENERGY** See Sector Supplement IP: EC & EUSS, p. 20

CATEGORY: ENVIRONMENTAL

ENVIRONMENTAL DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Original location of the Sector Disclosures in the Sector Supplement (2009)**
G4 Aspects	
Materials	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA Additional Guidance See Sector Supplement RG & EUSS, p. 40
	SECTOR ADDITIONS TO G4 INDICATORS G4-EN1 **MATERIALS USED BY WEIGHT OR VOLUME** Additional disclosure requirements See Sector Supplement IP: EN & EUSS, p. 5
Water	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA Additional Guidance See Sector Supplement RG & EUSS, p. 40
	SECTOR ADDITIONS TO G4 INDICATORS G4-EN8 **TOTAL WATER WITHDRAWAL BY SOURCE** Additional disclosure requirements See Sector Supplement IP: EN & EUSS, p. 14
Biodiversity	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA Additional Guidance See Sector Supplement RG & EUSS, p. 40 See Sector Supplement IP: EN & EUSS, p. 21
	SECTOR ADDITIONS TO G4 INDICATORS G4-EN12 **DESCRIPTION OF SIGNIFICANT IMPACTS OF ACTIVITIES, PRODUCTS, AND SERVICES ON BIODIVERSITY IN PROTECTED AREAS AND AREAS OF HIGH BIODIVERSITY VALUE OUTSIDE PROTECTED AREAS** Additional disclosure requirements See Sector Supplement IP: EN & EUSS, p. 18 Additional Guidance See Sector Supplement IP: EN & EUSS, p. 18

ENVIRONMENTAL DISCLOSURES FOR THE SECTOR CONTINUED

ENVIRONMENTAL DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Original location of the Sector Disclosures in the Sector Supplement (2009)**
G4 Aspects	
Biodiversity (cont.)	**SECTOR SPECIFIC INDICATORS** EU13 **BIODIVERSITY OF OFFSET HABITATS COMPARED TO THE BIODIVERSITY OF THE AFFECTED AREAS** See Sector Supplement IP: EN & EUSS, p. 20
Emissions	**SECTOR ADDITIONS TO G4 INDICATORS** G4-EN15 **DIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 1)** **Additional disclosure requirements** See Sector Supplement IP: EN & EUSS, p. 23 **Additional Guidance** See Sector Supplement IP: EN & EUSS, p. 24 G4-EN16 **ENERGY INDIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 2)** **Additional disclosure requirements** See Sector Supplement IP: EN & EUSS, p. 23 **Additional Guidance** See Sector Supplement IP: EN & EUSS, p. 24 G4-EN21 **NO_X, SO_X, AND OTHER SIGNIFICANT AIR EMISSIONS** **Additional disclosure requirements** See Sector Supplement IP: EN & EUSS, p. 28 **Additional Guidance** See Sector Supplement IP: EN & EUSS, p. 28
Effluents and Waste	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** See Sector Supplement RG & EUSS, p. 40

ENVIRONMENTAL DISCLOSURES FOR THE SECTOR CONTINUED

ENVIRONMENTAL DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Original location of the Sector Disclosures in the Sector Supplement (2009)**
G4 Aspects	
Effluents and Waste (cont.)	**SECTOR ADDITIONS TO G4 INDICATORS** **G4-EN22** **TOTAL WATER DISCHARGE BY QUALITY AND DESTINATION** **Additional disclosure requirements** See Sector Supplement IP: EN & EUSS, p. 29 **Additional Guidance** See Sector Supplement IP: EN & EUSS, p. 29 **G4-EN23** **TOTAL WEIGHT OF WASTE BY TYPE AND DISPOSAL METHOD** **Additional disclosure requirements** See Sector Supplement IP: EN & EUSS, p. 30 **Additional Guidance** See Sector Supplement IP: EN & EUSS, p. 30

CATEGORY: SOCIAL

SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK

LABOR PRACTICES AND DECENT WORK DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Original location of the Sector Disclosures in the Sector Supplement (2009)**
G4 Aspects	
Employment	**SECTOR SPECIFIC GUIDANCE FOR DMA** **G4-DMA** **Additional Guidance** Programs and processes to ensure the availability of a skilled workforce (former EU14) See Sector Supplement IP: LA & EUSS, p. 5 Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors (former EU16) See Sector Supplement IP: LA & EUSS, p. 7
	SECTOR ADDITIONS TO G4 INDICATORS **G4-LA1** **TOTAL NUMBER AND RATES OF NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER BY AGE GROUP, GENDER, AND REGION** **Additional disclosure requirements** See Sector Supplement IP: LA & EUSS, p. 10
	SECTOR SPECIFIC INDICATORS **EU15** **PERCENTAGE OF EMPLOYEES ELIGIBLE TO RETIRE IN THE NEXT 5 AND 10 YEARS BROKEN DOWN BY JOB CATEGORY AND BY REGION** See Sector Supplement IP: LA & EUSS, p. 6 **EU17** **DAYS WORKED BY CONTRACTOR AND SUBCONTRACTOR EMPLOYEES INVOLVED IN CONSTRUCTION, OPERATION & MAINTENANCE ACTIVITIES** See Sector Supplement IP: LA & EUSS, p. 11 **EU18** **PERCENTAGE OF CONTRACTOR AND SUBCONTRACTOR EMPLOYEES THAT HAVE UNDERGONE RELEVANT HEALTH AND SAFETY TRAINING** See Sector Supplement IP: LA & EUSS, p. 12

SOCIAL DISCLOSURES FOR THE SECTOR CONTINUED

LABOR PRACTICES AND DECENT WORK DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Original location of the Sector Disclosures in the Sector Supplement (2009)**
G4 Aspects	
Occupational Health and Safety	**SECTOR ADDITIONS TO G4 INDICATORS** G4-LA6 **TYPE OF INJURY AND RATES OF INJURY, OCCUPATIONAL DISEASES, LOST DAYS, AND ABSENTEEISM, AND TOTAL NUMBER OF WORK RELATED FATALITIES, BY REGION AND BY GENDER** **Additional disclosure requirements** See Sector Supplement IP: LA & EUSS, p. 17 **Additional Guidance** See Sector Supplement IP: LA & EUSS, p. 17

SUB-CATEGORY: HUMAN RIGHTS

HUMAN RIGHTS DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Original location of the Sector Disclosures in the Sector Supplement (2009)**
G4 Aspects	
Freedom of Association and Collective Bargaining	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** See Sector Supplement IP: HR & EUSS, p. 7

SOCIAL DISCLOSURES FOR THE SECTOR CONTINUED

SUB-CATEGORY: SOCIETY

SOCIETY DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Original location of the Sector Disclosures in the Sector Supplement (2009)**
G4 Aspects	
Local Communities	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Stakeholder participation in the decision making process related to energy planning and infrastructure development (former EU19) See Sector Supplement IP: SO & EUSS, pp. 3-4 Approach to managing the impacts of displacement (former EU20) See Sector Supplement IP: SO & EUSS, p. 5 See Sector Supplement IP: SO & EUSS, pp. 7-8
	SECTOR SPECIFIC INDICATORS EU22 **NUMBER OF PEOPLE PHYSICALLY OR ECONOMICALLY DISPLACED AND COMPENSATION, BROKEN DOWN BY TYPE OF PROJECT** See Sector Supplement IP: SO & EUSS, p. 9
Sector specific Aspects	
Disaster/ Emergency Planning and Response	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans (former EU21) See Sector Supplement IP: SO & EUSS, p. 6

SOCIAL DISCLOSURES FOR THE SECTOR CONTINUED

SUB-CATEGORY: PRODUCT RESPONSIBILITY

PRODUCT RESPONSIBILITY DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Original location of the Sector Disclosures in the Sector Supplement (2009)**
G4 Aspects	
Customer Health and Safety	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** See Sector Supplement IP: PR & EUSS, p. 5
	SECTOR SPECIFIC INDICATORS EU25 **NUMBER OF INJURIES AND FATALITIES TO THE PUBLIC INVOLVING COMPANY ASSETS, INCLUDING LEGAL JUDGMENTS, SETTLEMENTS AND PENDING LEGAL CASES OF DISEASES** See Sector Supplement IP: PR & EUSS, p. 6
Sector specific Aspects	
Access	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services (former EU23) See Sector Supplement IP: PR & EUSS, p. 3
	SECTOR SPECIFIC INDICATORS EU26 **PERCENTAGE OF POPULATION UNSERVED IN LICENSED DISTRIBUTION OR SERVICE AREAS** See Sector Supplement IP: PR & EUSS, p. 7 EU27 **NUMBER OF RESIDENTIAL DISCONNECTIONS FOR NON-PAYMENT, BROKEN DOWN BY DURATION OF DISCONNECTION AND BY REGULATORY REGIME** See Sector Supplement IP: PR & EUSS, p. 8 EU28 **POWER OUTAGE FREQUENCY** See Sector Supplement IP: PR & EUSS, p. 9 EU29 **AVERAGE POWER OUTAGE DURATION** See Sector Supplement IP: PR & EUSS, p. 10 EU30 **AVERAGE PLANT AVAILABILITY FACTOR BY ENERGY SOURCE AND BY REGULATORY REGIME** See Sector Supplement IP: PR & EUSS, p. 11

SOCIAL DISCLOSURES FOR THE SECTOR CONTINUED

PRODUCT RESPONSIBILITY DISCLOSURES FOR THE ELECTRIC UTILITY SECTOR	
Aspects	**Original location of the Sector Disclosures in the Sector Supplement (2009)**
Sector specific Aspects	
Provision of Information	**SECTOR SPECIFIC GUIDANCE FOR DMA** G4-DMA **Additional Guidance** Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services (former EU24) See Sector Supplement IP: PR & EUSS, p. 4

6 ANNEX II ELECTRIC UTILITIES SECTOR DISCLOSURES CONTENT DEVELOPMENT

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