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Presentation of outputs:

# Regulation on start-up and shut-down periods for LCP: practical case and draft Rulebook

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Project implemented by
Projekat sprovodi
altair asesores
in consortium with:
u konzorcijumu sa:
IRZ, European Profiles, Eurosupport and Eptisa
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# EU Commission Implementing Decision

- EU Secondary Legislation
- Binding legal instrument
- Directly applicable in its entirety

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# EU Commission Implementing Decision

- Transposition is not necessary
- Immediately binding only for EU MS

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# EU Decision 2012/49/EU

- Following art.41 of IED
- Implementing rules for start-up and shut-down periods of LCP
- Technical rules that need to be implemented in the existing legal and administrative frame

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# EU Decision 2012/49/EU

Scope: regulate SU and SD periods

- SU and SD: periods where the plant is not able to safely and reliably deliver its output to a network, grid, heat accumulator or industrial site

- SU and SD: highly depending on the type of burner, fuel and abatement system

- During SU and SD, the results of monitoring are NOT valid for compliance assessment (part 4 of Annex V, IED)

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# EU Decision 2012/49/EU

Technical rules:

1.

- Minimum load compatible with steady operations (incl. Abatement system) → LOAD THRESHOLD

- Operational parameters → OPERATIONAL PARAMETERS

2. Measures to minimize SU and SD

3. Measures on abatement systems

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# EU Decision 2012/49/EU in EU MS

- Decision is implemented in the frame of IPPC permits
- Operator proposes the load or process thresholds according to the plant's configuration
- Integrated permits are changed accordingly (conditions and monitoring plan)
- SU and SD regulation is checked by environmental inspections

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# EU Decision 2012/49/EU in EU MS

Practical case: ITALY

- Monitoring plan in the IP includes the following conditions:
  - Definition of a Technical Minimum Load, threshold for steady operations (typically % of max load)
  - Register of SU and SD episodes (duration, reasons...)
  - Register of measured emissions during the SU and SD periods (not valid for the compliance assessment)

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# EU Decision 2012/49/EU in EU MS

## Practical case: UK

- Competent Authority is requiring the operator to prepare a technical proposal
- Proposal should include the minimum load in correspondance with the beginning of production of electricity (1° KW)
- The permit is not changed but the proposal is included in the environmental inspection

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# Rulebook on SU and SD periods for LCP

Connected with the Law on Air Protection

Provides technical rules for SU and SD for the cases mentioned in the regulation on ELV and monitoring

Directly connected with the Law on IPPC because it will be implemented by the integrated permitting procedure

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# Rulebook on SU and SD periods for LCP

## Art.1 – Scope

The Rulebook applies immediately ONLY for new LCP and installations that are running a CEMS.

For existing LCP the technical rules will apply when the integrated permit will be issued.

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# Rulebook on SU and SD periods for LCP

## Art.2 – Definitions

- ‘minimum start-up load for stable generation’ means the minimum load compatible with the steady operation of the generating combustion plant following start-up initiation after which the plant is able to safely and reliably deliver its output to a network, grid, heat accumulator or industrial site
- combustion plants consisting of two or more units means installations constituting of a combination of two or more separate combustion plants in which the waste gases are discharged through a common chimney, regardless if they are collected via separate pipe lines or channels

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# Rulebook on SU and SD periods for LCP

## Art.4 – Procedure

- The criteria and parameters to determine the start-up and shut-down periods are indicated in the Integrated permit
- The application for the integrated permit shall include a report containing:
  - list and description of the SU and D periods;
  - proposal related to minimum loads (according to art.6 and 7 of the Rulebook) or processes and parameters (according to art.9 and included in the list at Annex 1 of the Rulebook)
  - description of the procedures, technical and operational, adopted by the operator in order to monitor and report number, reasons and duration of the SU and SD.

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# Rulebook on SU and SD periods for LCP

## Art.6 – Minimum load

- Electricity generation: fixed percentage of the rated electrical output of the combustion plant

- Heat generation: fixed percentage of the rated thermal output of the combustion plant.

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# Rulebook on SU and SD periods for LCP

Art.9 – operational parameters

OPTION: 3 criteria chosen from:

**Discrete processes associated with the minimum start-up load for stable generation**

- transition to operating with normal fuel only.
- start of the main fuel feed pump
- fully premixed steady state combustion mode

**Operational parameters**

- Oxygen content of the flue gases.
- Flue gas temperature.
- Steam pressure.
- enthalpy and heat transfer fluid rate.
- fuel flow rate
- temperature of steam at the exit of the boiler.