Water and beverages / WB-06

Production lines during internet and power outages

Preparing a local buffer so that outages do not stop the line because of marking, and logging every outage.

The line must keep running, even without connectivity.

Marking has made the line dependent on internet and power supply. Manufacturers and an industry association say outages can stop production.

Conceptual architecture. No operating results are shown.

01 Codes	Advance ordering · Reserve on the local server · Stock level control
02 Power	UPS: server, camera · Voltage measurement · Automatic restart
03 Connectivity	Backup link · Report queue · Send once restored
04 Log	Outage time · Cause · Impact on the line

At a glance

288.1 — Record summer daily electricity consumption, million kWh, July 2026. [1]

Immediately — According to a representative of a major manufacturer, a minor code-reading fault or an internet outage stops the line this quickly. [2]

Peak — Hours when, according to a Ministry of Energy warning, temporary outages may occur in some regions. [1]

November 2026

01 Evidence and context

Who it is for

Production Director	Does the line keep running during an outage?
Chief Power Engineer	Power supply, UPS, outage log.
Head of IT	Internet link, local server.
Plant Owner	Cost of outages per month.

Facts and global practice

UzBev Association

Regular internet and power outages can stop production. [3]

Representative of a major manufacturer

A minor fault in reading a code or an internet outage stops the line immediately. [2]

Ministry of Energy, 16.07.2026

Summer daily consumption reached a new record of 288.1 million kWh. [1]

Ministry of Energy, 16.07.2026

During peak hours, technical faults in the grid may cause temporary outages in some regions. [1]

Outage frequency and duration depend on the region and the plant. Measuring them is the first step at the plant.

02 Where the losses occur

Not enough codes held at the plant

If codes are requested only when needed, the line cannot run when the internet is down.

Server and camera without backup power

Even after a short power outage, the server and camera take time to restart.

Report submission holds up the line

If the next step cannot proceed until data is sent, a connection loss carries over to the line.

Outages are not logged

How much time and how much product were lost remains unknown.

How the loss is calculated

Outage loss	outage minutes × units/minute × margin per unit
Restart	restart minutes × units/minute × margin per unit
Scrap	units rendered unusable during the outage × unit cost
Codes	codes lost during the outage × cost per code

Illustrative calculations; establish the baseline, units and rates during the site assessment. Avoid counting the same loss twice.

Local buffer and outage log

The data and power the line needs are kept within the plant. Once the connection is restored, data is sent from a queue.

01 Codes

Advance ordering · Reserve on the local server · Stock level control

02 Power

UPS: server, camera · Voltage measurement · Automatic restart

03 Connectivity

Backup link · Report queue · Send once restored

04 Log

Outage time · Cause · Impact on the line

Modules

Local code server	Storing codes at the plant and supplying them to the line	Engineering capability
Report queue	Sending to Asl belgisi once the connection is restored	Engineering capability
Outage log	Power and internet outages and their impact on the line	Engineering capability
Energy monitoring	Voltage and consumption measurement	In development

Each module has a readiness status. Third-party results are not a forecast for your site.

04 Implementation and measurement

01 Outage audit

Outages and their impact on the line are recorded for one month.

Output: outage map.

02 Buffer design

Code reserve, UPS and queue are designed.

Output: design and budget.

03 Pilot on one line

An outage is simulated for testing.

Output: the line runs without connectivity.

04 Scale-up

The remaining lines are connected.

Output: monthly report.

What is measured

Outages	Number and duration, by type	Outage log
Downtime due to outages	Minutes of line stoppage	Operator panel
Restart time	From restoration of supply to line restart	Log
Code reserve	Codes on the local server relative to hourly output	Local server

What is needed to start

- Responsible persons for power and IT
- Power and internet layout diagram
- Line and server locations
- Line time window for testing

05 Readiness checklist and next step

01 Are power and internet outages recorded in a log?	Yes / No / Unknown
02 Are the minutes of downtime caused by outages known?	Yes / No / Unknown
03 Are codes reserved in advance at the plant?	Yes / No / Unknown
04 Are the server and camera connected to a UPS?	Yes / No / Unknown
05 Is UPS status checked regularly?	Yes / No / Unknown
06 Is there a backup internet link?	Yes / No / Unknown
07 Are reports queued when the connection is lost?	Yes / No / Unknown
08 Is the time the line takes to restart after an outage measured?	Yes / No / Unknown
09 Has an outage test been carried out?	Yes / No / Unknown
10 Is there a person responsible for this area?	Yes / No / Unknown

What we do not promise

- Firm timeline and price without an audit
- Government decisions and deadlines
- Changes to line software without the equipment supplier's approval
- Unmeasured results or savings
- Quality of service of the power grid or internet provider
- Operating procedures outside Asl belgisi system rules

Outage audit

We measure how outages affect the lines at your plant and propose a local buffer design.

- Outage map
- Buffer design
- Plan and budget

Scope, price and schedule are agreed after reviewing the site and its data.

06 Sources and scope

[1] Ministry of Energy announcement. gov.uz/ru/minenergy, 16.07.2026.

gov.uz/ru/minenergy

[2] Statement by a representative of a major manufacturer. gazeta.uz, 30.03.2026.

gazeta.uz

[3] UzBev Association statement. gazeta.uz, 15.04.2026.

gazeta.uz

Prepared from the cited sources. Vendor statements and reported sector figures are attributed, not independently verified here. No performance, certification or regulatory outcome is guaranteed. Check the current official rules before making decisions.

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