APCS Power Clearing & Settlement

Warning: Violation of terms and conditions

Not system supporting imbalance energy

BG Name

Observation period:
June 2025

Evaluation date:
20. August, 2025

Definitions

Turnover criteria

Share of imbalance energy volume (de: Ausgleichsenergie (AE)) in turnover (de: Umsatz)

$$\frac{\sum_{t \in M} |AE_t|}{\sum_{t \in M} Umsatz_t}$$

Imbalance of balance group (de: Delta der Bilanzgruppe (DBG))

The imbalance of balance group in one qh is calculated as difference between deficit (de: Bezug) and surplus (de: Lieferung) of imbalance energy (de: Ausgleichsenergie (AE))}, or equivalent the non zero value of $AE_{Lieferung}$ or $-AE_{Bezug}$ respectively.

$$DBG := AE_{Lieferung} - AE_{Bezug} = \begin{cases} AE_{Lieferung}, & \text{if } AE_{Lieferung} \neq 0 \\ -AE_{Bezug}, & \text{otherwise} \end{cases}$$

Control area imbalance (Delta der Regelzone (DRZ))

The following Text was adopted from the Markttransparenz APG[1] website.

> The control area imbalance is the Surplus (positive values) or deficit (negative values) of electrical energy in the APG control area. It equals the algebraic sum of all balancing group deviations (balancing energy). At the same time the control area imbalance is calculated from the algebraic sum of the following components:
>
> - Automatic frequency restoration reserve
> - Manual frequency restoration reserve
> - Unintended exchange with the Continental European synchronous Network
>
> The average quarter-hour values of the control area imbalance and the requested manual frequency restoration reserve in MW are usually published shortly after the end of each quarter of an hour. The **„operational data“** illustrated is based on measured data and is not as accurate as the measurements that are used for the settlement. **„Data relevant for settlement“** shows intermediate measured values after initial data matching. The figures are replaced by final data relevant for settlement after matching and alignment processes with all involved partners.

Three imbalance time series are used to evaluate the contribution of a balance group to the stability of the system. These are the operational control area imbalance published by APG and two imbalance time series relevant for settlement published by APG and APCS. Operational (de: betrieblich) control area imbalance used for the calculations is published by APG at 2 a.m. the following day (D+1). The two time series relevant for settlement (de: abrechnungsrelevant) are published by APG and APCS after clearing. Operational data is available closer to the real-time than imbalance relevant for settlement. It could be used for predictions of the control area imbalance in the following quarter hours. Control Area Imbalance relevant for settlement has higher precision and directly impacts settlement prices. For simplicity only the short form for the control area imbalance DRZ (de: Delta der Regelzone) is used in the description bellow. Contributions of the balance group to the system stability are evaluated with all three time series separately. Afterwards the balance group is evaluated with the for it most favorable result.

$$DRZ = \begin{cases} DRZ_{abrechnungsrelevant_{APCS}} \\ DRZ_{abrechnungsrelevant_{APG}} \\ DRZ_{betrieblich} \end{cases}$$

[1] https://markttransparenz.apg.at/en/markt/Markttransparenz/Netzregelung/Deltaregelzone

Control area imbalance without balance group (DRZ ohne BG)

$$DRZ_{\text{ohne BG}} = DRZ - DBG$$

System supporting contribution

System supporting contribution (de: systemdienlicher Beitrag) of balance group is the volume by which the absolute value of the control area imbalance (DRZ) is reduced in the quarter hour.

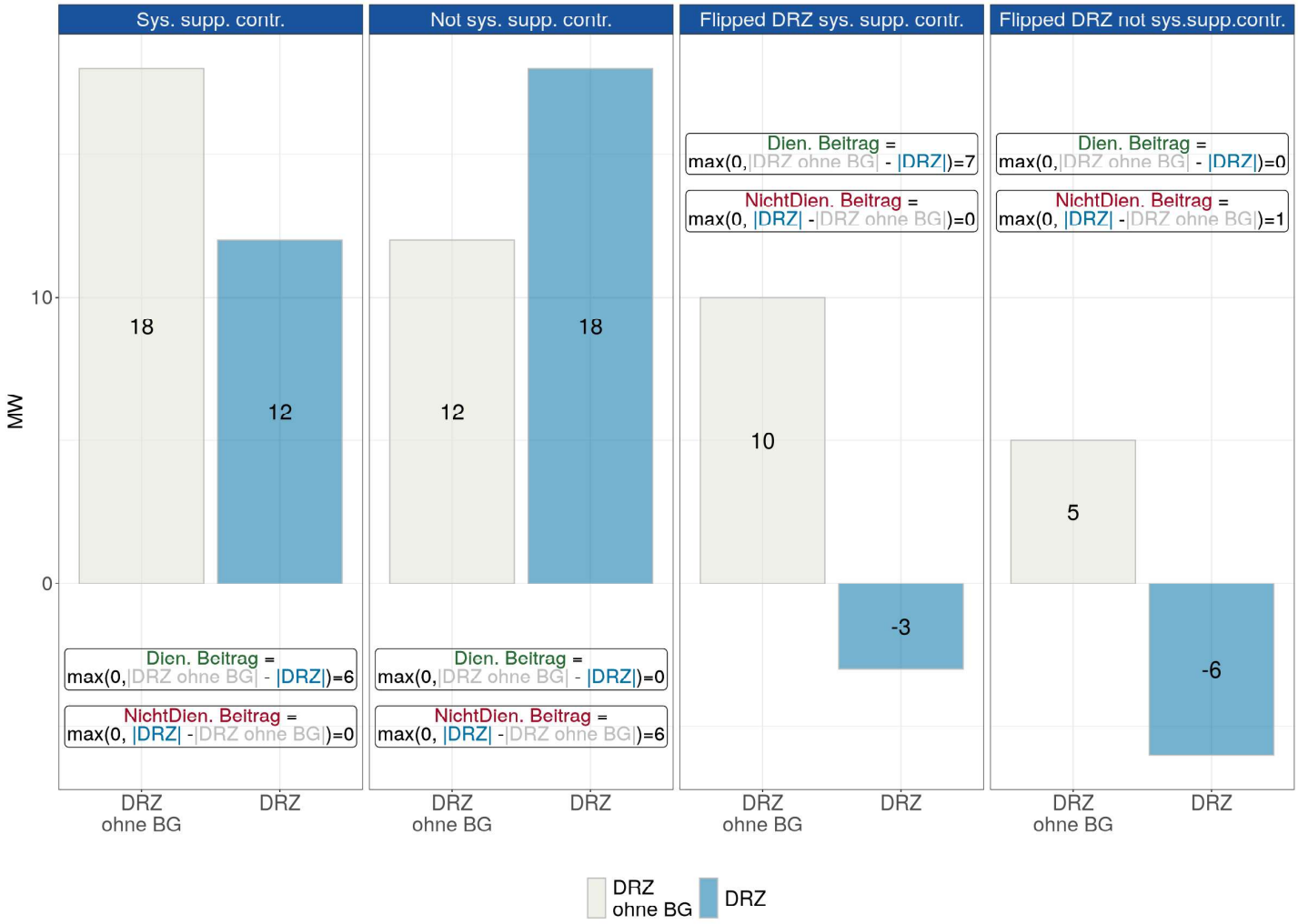
Not system supporting contribution (de: nicht systemdienlicher Beitrag) of balance group is the volume by which the absolute value of the control area imbalance (DRZ) is increased in the quarter hour.

$$\begin{aligned}\text{Systemdienlicher Beitrag}_t &= \max(0, |DRZ_{\text{ohne BG}}| - |DRZ|)\\ \text{Nicht Systemdienlicher Beitrag}_t &= \max(0, |DRZ| - |DRZ_{\text{ohne BG}}|)\end{aligned}$$

Monthly index of the contributions to the system stability (de: Erfolgsquote (EQ))

$$EQ = \frac{\sum_{t \in M} \text{Sys.dien. Beitrag}_t}{\sum_{t \in M} \text{Sys.dien. Beitrag}_t + \sum_{t \in M} \text{Nicht Sys.dien. Beitrag}_t}$$

Examples



Criteria

According to General Terms and Conditions of Business of the Balance Group Coordinator[2]the following criteria apply to assess not system supporting behavior.

a) the share of the imbalance energy volume of a month in the turnover volume of the balance group is greater than 0.50

$$\frac{\sum_{t \in M} |AE_t|}{\sum_{t \in M} Umsatz_t} > 0.50$$

and

b) the share of the total volume of absolute changes in the (aggregated) system imbalance of the control area in which the (aggregated) system imbalance decreased is a percentage of less than 0.53 in the total volume of absolute changes to the (aggregated) system imbalance in this month

$$EQ = \frac{\sum_{t \in M} \text{Sys.dien. Beitrag}_t}{\sum_{t \in M} \text{Sys.dien. Beitrag}_t + \sum_{t \in M} \text{Nicht Sys.dien. Beitrag}_t} < 0.53$$

Calculation of the criterion b) is based on the timely (2 AM D+1) operational time series published by APG and the two time series of APCS and APG relevant for settlement . The criterion is satisfied if and only if the inequality holds for all three time series.

Balance group statistics

Statistics

Table 1: Statistics

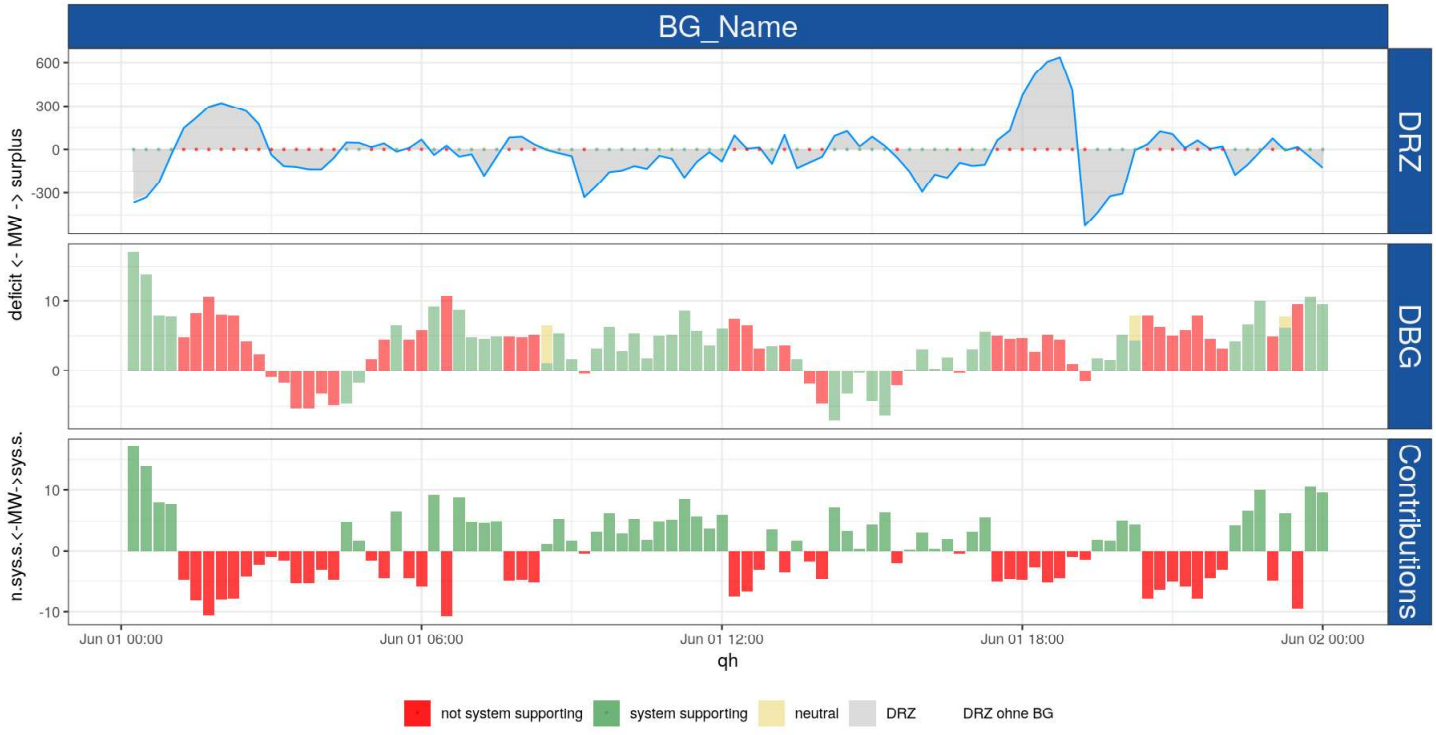
Month	June, 2025
Amount imbalanced qh	2880
Turnover [MWh]	3 391.68
Total imbalance [MWh]	3 248.85
Imbalance % turnover	95.79%
Consumption [MWh]	0
Generation [MWh]	0
Flipped DRZ settlement	1.53%
Flipped DRZ settlement APG	1.53%
Flipped DRZ operational	1.18%

Share of system supporting imbalance volume (EQ)

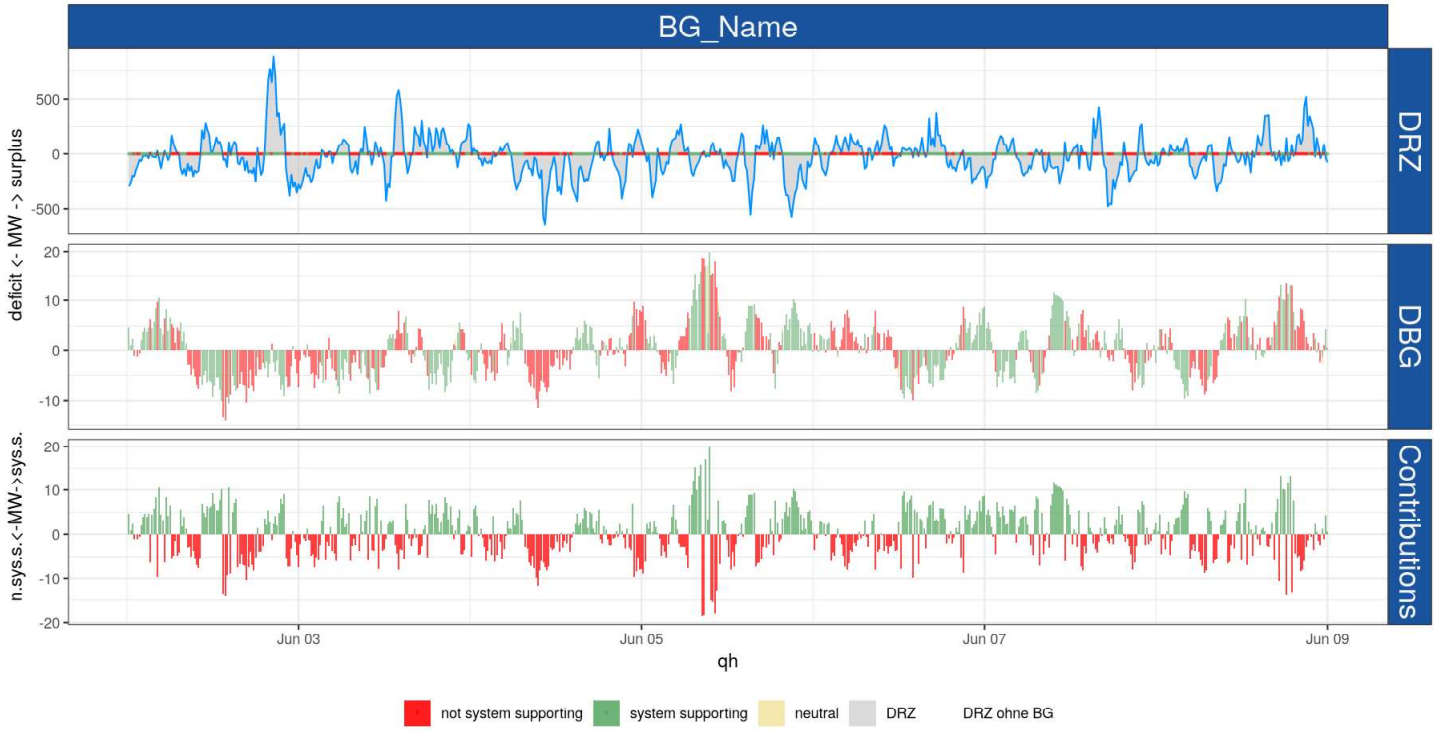
Table 2: Share of system supporting imbalance volume (EQ)

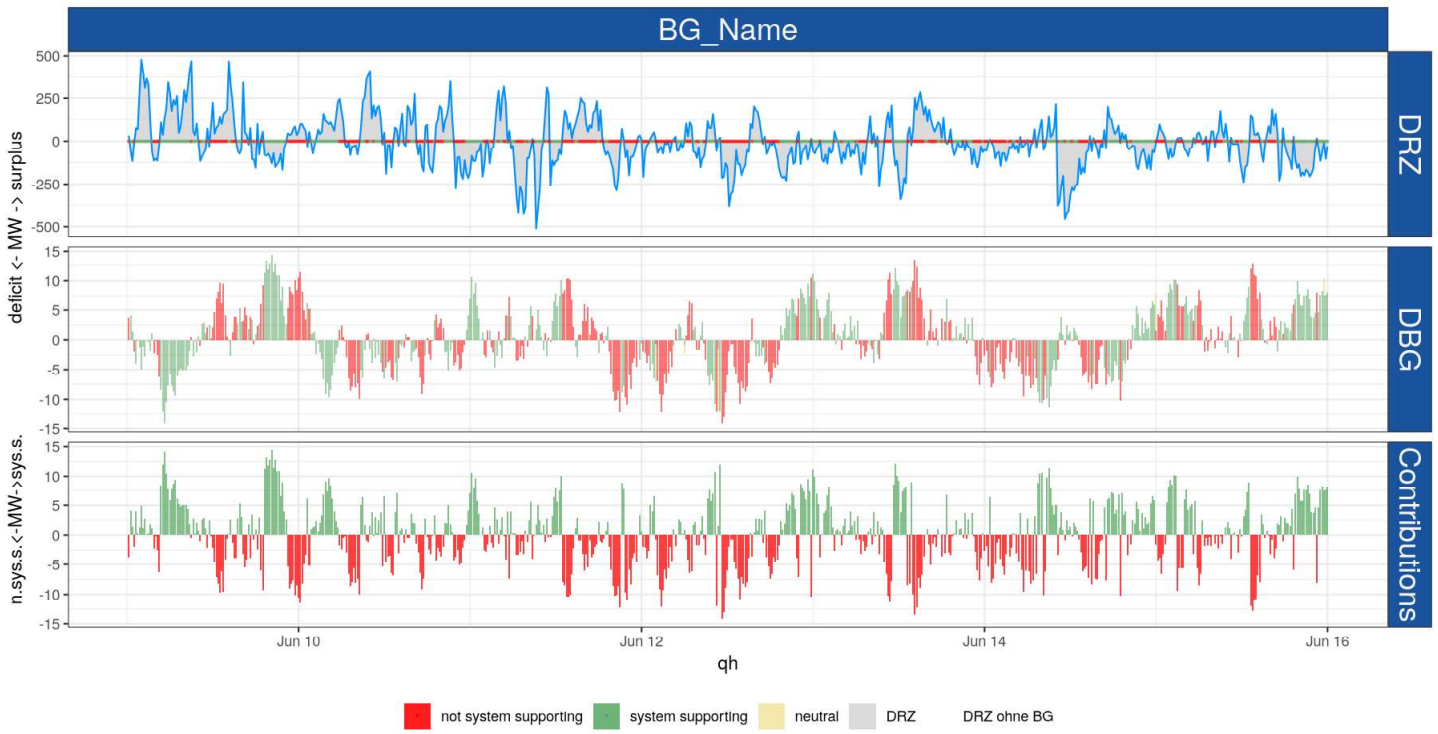
Month	EQ settlement APCS	EQ settlement APG	EQ operational
June, 2025	50.33%	50.33%	50.67%

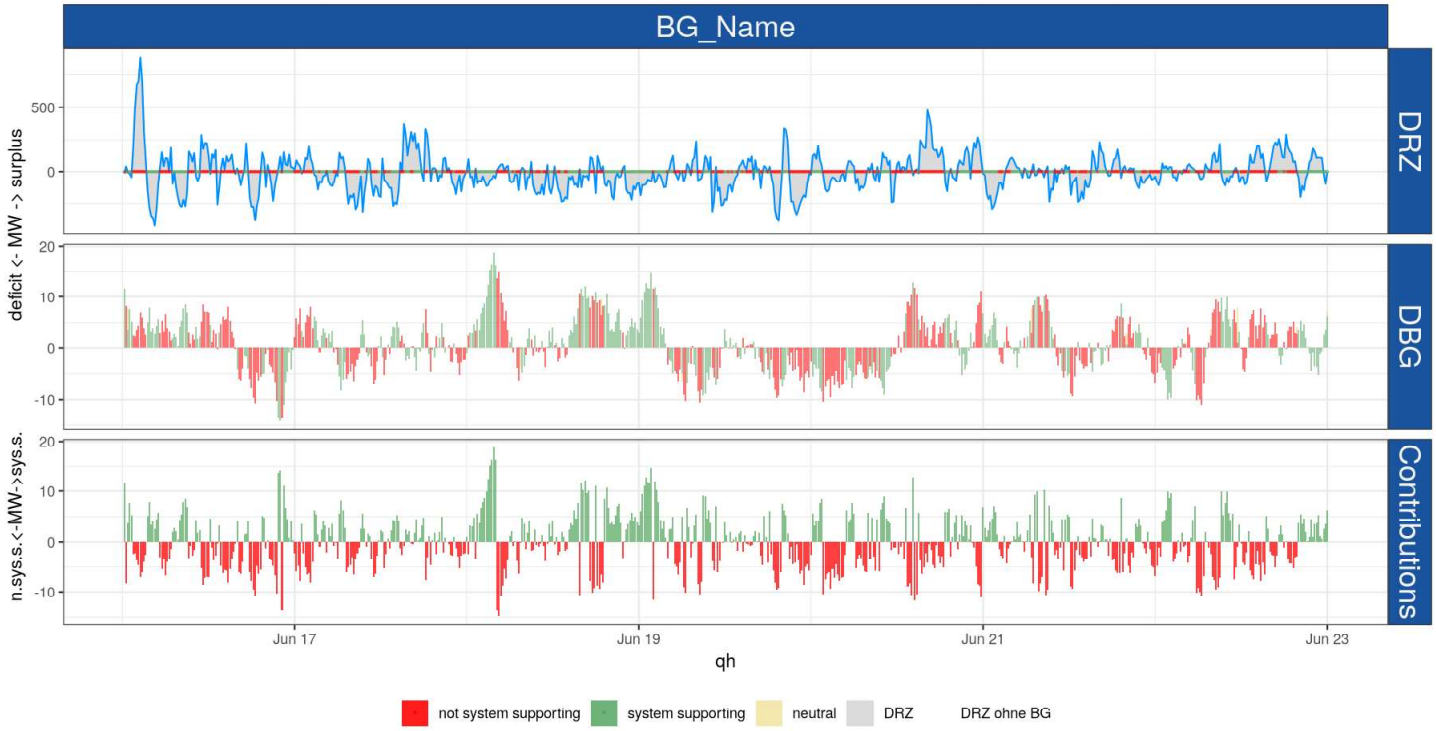
Operational DRZ, imbalance energy and system supporting contribution

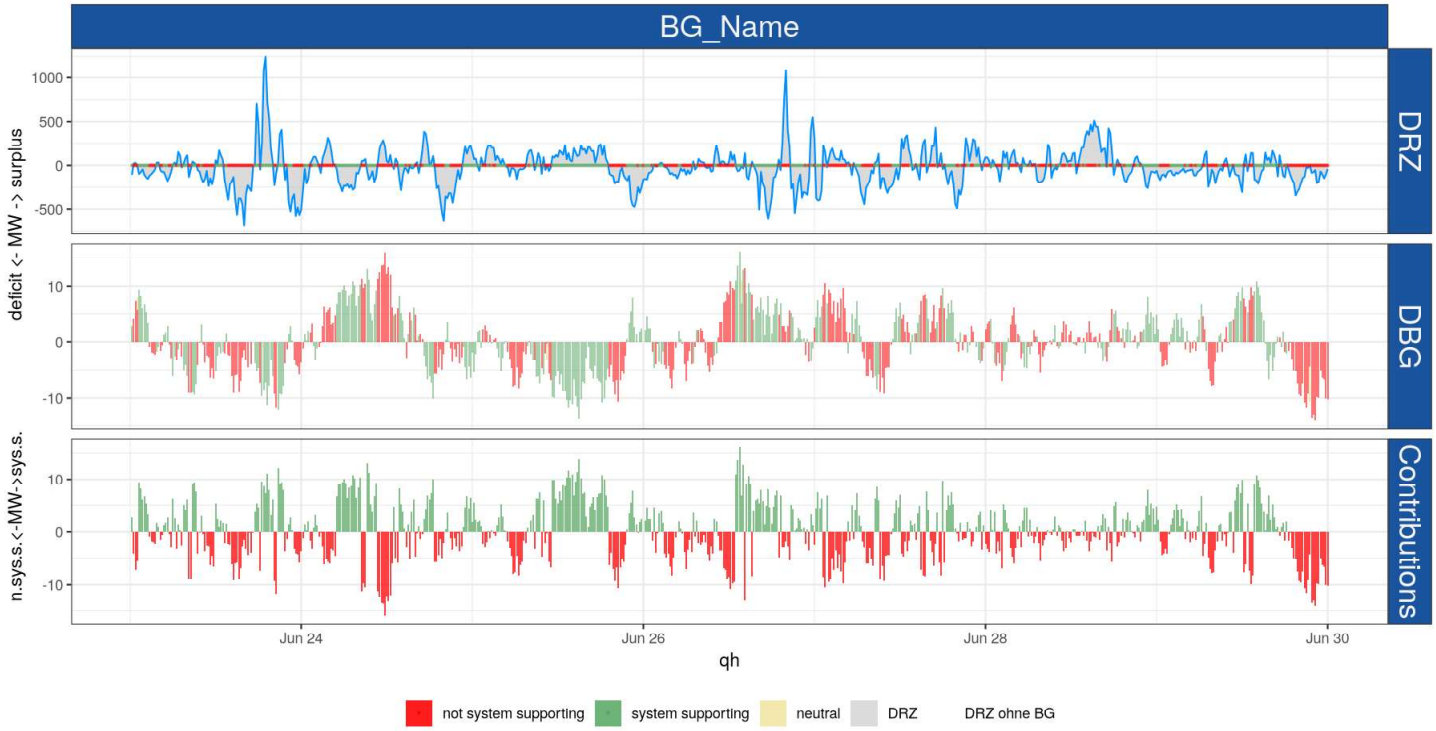


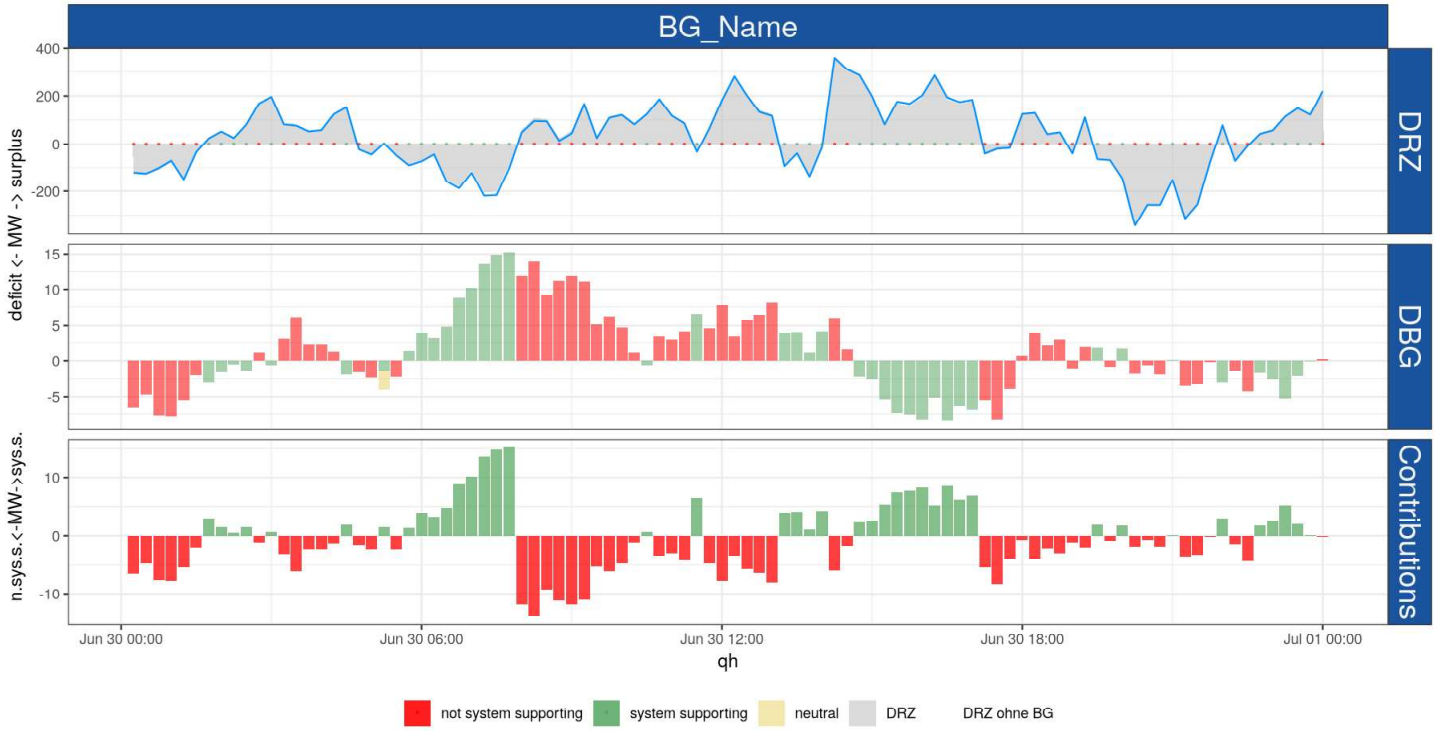
[2]https://www.apcs.at/apcs/regelwerk/aktuelle_version/english/ab-bko-apcs-mar-2023-v16-EN.pdf?#page=7


BG_Name
DRZ
DBG
Contributions
deficit <- MW -> surplus
n.sys.s.<-MW->sys.s.
Jun 03
Jun 05
Jun 07
Jun 09
qh
not system supporting
system supporting
neutral
DRZ
DRZ ohne BG


BG_Name
DRZ
DBG
Contributions
deficit <- MW -> surplus
n.sys.s.<-MW->sys.s.
Jun 10
Jun 12
Jun 14
Jun 16
qh
not system supporting
system supporting
neutral
DRZ
DRZ ohne BG


BG_Name
DRZ
DBG
Contributions
deficit <- MW -> surplus
n.sys.s.<-MW->sys.s.
500
0
20
10
0
-10
Jun 17
Jun 19
Jun 21
Jun 23
qh
not system supporting
system supporting
neutral
DRZ
DRZ ohne BG


BG_Name
DRZ
DBG
Contributions
deficit <- MW -> surplus
n.sys.s.<-MW->sys.s.
1000
500
0
-500
10
0
-10
Jun 24
Jun 26
Jun 28
Jun 30
qh
not system supporting
system supporting
neutral
DRZ
DRZ ohne BG


BG_Name
DRZ
DBG
Contributions
deficit <- MW -> surplus
n.sys.s.<-MW->sys.s.
400
200
0
-200
15
10
5
0
-5
10
0
-10
Jun 30 00:00
Jun 30 06:00
Jun 30 12:00
Jun 30 18:00
Jul 01 00:00
qh
not system supporting
system supporting
neutral
DRZ
DRZ ohne BG