

Stakeholder Reference Group Weekly Meeting

CONTACT:

Eva.Hennig@thuega.de
andrzej@renewables-grid.eu
Vasiliki.Klonari@windeurope.org
bclaeys@raponline.org

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ATTENDEES

Member Name	Organisation
Alexandre Oudalov	T&D Europe
Anastasios Perimenis	CO2Value
Andrej Stancik	EFET
Christian Kjaer	CurrENT
Elisabeth Cremona	Ember
Ganni Vassallo	Bellona
Giuseppe Lorubio	EHI
Gregor Frey	Gas DSOs in CEDEC, Eurogas, GD4S, GEODE
Grzegorz Pawelec	Hydrogen Europe
Joni Karjalainen	CAN Europe
Lasse Torgersen	IFIEC
Marcia Poletti	SmartEn
Maria de los Angeles De Vicente Puente	GIE
Marion Malafosse	SmartEN
Mohammed Abi Afthab Olikathodi	Eurelectric
Pawel Lont	EFET
Tobis Bühnen	GIE
Vidushi Dembi	Wind Europe

Observers Name	Organisation
Kamila Paquel	ESABCC
Joan Frezouls	ENTSO-G
David Radu	ENTSO-E
Lea Dehaut	ENTSO-E
Nalan Buyuk	ENTSO-E

Co-convenors & vice-convenors	Organisation
Eva Hennig	Gas DSOs in CEDEC, Eurogas, GD4S, GEODE
Bram Claeys	RAP

AGENDA POINTS

11.00-12.00 am	<ol style="list-style-type: none"> 1. Welcome 2. Update on delivering the 2024 TYNDP feedback and voting results responses 3. SOS Loop 4. Voting on ToR 5. Setting up the SRG working groups for 2026 Scenario Process 6. Meeting of Convenors with ACER and EU Commission on Feb 29th 7. Publication of material on the SRG website 8. AoB
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SUMMARY

Point 2	<p>The TYNDP feedback was finalized and will be published on the SRG website. Each member has received their own voting results for documentation.</p>
Point 3	<p>SOS Loop presented by the ENTSOs. It's a post-processing step executed after the scenarios are executed to analyse if additional generation capacity or infrastructure is needed in addition to the market modeling. In the market modeling calculation due to the huge amount of data certain aggregation is done. The temporal granularity is reduced to 2000 h. To identify potential system needs, the SOS loop is executed. Still extreme situations with e.g. low RES-High demand are already identified in the market modelling tool and don't depend solely on the SOS loop.</p> <p>The ground rule of the SOS loop is defined in the CBA 4.0 definition: each system has to be designed in a way that the LOLE (Loss of Load Expectation) is limited to 3 h, even if MS have different LOLE standards.</p> <p>The SOS loop was already run for electricity in the TYNDP 2022, in 2024 the additional loop for H2 is new.</p> <p>There is a threshold of 100 MWh for Energy not served (ENS), above which a need for additional capacity is defined. It is assumed that below the threshold units from neighboring zones will deliver.</p> <p>The fuel for the generators (CH₄, H₂, diesel, oil) will be left to the national assessment. Demand response could be alternative, if it is available at that point in time and not already used up. Whatever technology is chosen the price assumed is the highest on the merit order. Demand response and storage will also be mentioned in the report. Ultimately the local national knowledge is important.</p> <p>There is no link to the ERAA report as it has a different goal (probabilistic assessment of Monte Carlo years). Nonetheless the methodology does partly overlap and should increasingly align.</p> <p>The LOLE (Loss of Load Expectation) is fixed at 3h to keep the calculation as generic as possible, The SOS loop for methane is not part of the exercise as methane infrastructure is not planned in the TYNDP 2024. This does however raise the question to what extent the SoS for H2 is aligned with the CH₄ network.</p> <p>ENS (electricity not served) is aggregated in the 3 main nodes of a electricity system per country. The dispatch simulation delivers all time stamps where energy is not served. All timeframes below 3 h are discarded and only those above 3 h are analysed specifically.</p> <p>1995, 2008, 2009 are the climate years. For the loops the extremes are taken from these 3 years.</p>

Point 3

- > As was the case in the 2022 scenarios, an ex-post adequacy loop is required once draft scenarios are run – ensuring that the amount of ENS is limited to periods of severe scarcity
- > In essence, the methodology does not change compared to last cycle:
 - ▷ Run expansion models – get capacities
 - ▷ Run dispatch models for all climate conditions – retrieve mix
 - ▷ Assess ENS per carrier and node
 - ▷ Assume some adequacy threshold (e.g., LOLE) and determine the ENS threshold within
 - ▷ Add / assess existing supply sources such that ENS is mitigated accordingly
 - ▷ Re-run dispatch runs for all climate conditions under new supply conditions
 - ▷ Refine peaker capacities as max generation in dispatch runs

In this cycle, both electricity and hydrogen systems will be evaluated



12.03.2024



2

- > The electricity-side adequacy loop remains very similar to the previous cycle. A set of figures are used to parametrize the approach:
 - ▷ ENS categories: eMarket & RETE & EV
 - ▷ LOLE: 3h
 - ▷ ENS threshold: 100 MWh
 - ▷ Power plant technology used: "generic" peaker/OCGT
 - ▷ Power plant unit size: 500 MW
 - ▷ Power plant VOM: ~30 EUR/MWh (20x OCGT VOM – to ensure last position in merit order)
 - ▷ Fuel used: left open (VOM only) – country-dependent in assessment



12.03.2024



3

- > For a first time, an adequacy loop will be investigated for the hydrogen system. A couple of aspects to consider:
 - ▷ LOLE: 3h
 - ▷ Price: ammonia price + EUR1
 - ▷ Source used: generic – depending on the country, it can be storage/imports/SMRs, with ex -post check of volumes/capacities



12.03.2024



4

Point 4	Voting of the ToR: 16 votes have been cast, with 1 abstention. Quorum has been reached, but voting is still open until end of March 5 th .
Point 5	<p>All SRG members and their alternates should please join at least one working group. The excel file can be found:</p> <p>https://extra.entsoe.eu/SDC/SB/ETAG/layouts/15/WopiFrame.aspx?sourcedoc={12C95C82-0B1B-4FA8-844B-30733E56707E}&file=Mebers%20expertise%20%26%20working%20groups%20proposal.xlsx&action=default</p> <p>All SRG members were attributed to the WGs according to the expertise, therefore many members are in several WG's. Members and alternates are asked to check the table and choose their working group. Please only use the green table "Working group proposal"</p>
Point 6	EU Commission and ACER thank the SRG members for their efforts. They acknowledge the engagement and time spent by the members to deliver concrete proposals to the ENTSOs in such a short time. They see the work as an important part of the TYNDP process. They encourage the SRG members to intensively join the debate on the 2026 scenarios especially on the influence and potential KPI of economic growth in the EU on the scenarios.
Point 7	The ToR and the minutes of the meetings will be published next week at the SRG website.
Point 8	Andrzej will present the SRG at the Workshop of Copenhagen School of Infrastructure on March 21 st , 2024 "Unlocking Energy Grids Together: Engaging Stakeholders for Sustainable Infrastructure". It's an open event and members of the SRG can join it – registration is under: https://cbs.nemtilmeld.dk/904/

ACTIONS		FOLLOW-UP + RESPONSIBILITY
Action 1	Sent files for publication on website to ENTSO's	Eva → done including publication on website https://www.entsoe.eu/tyndp-scenarios/stakeholder-involvement/#srg
Action 2	Organize workshop for data management	Eva → done, date 18.3. Teams invite sent to SRG
Action 3	SRG members and alternates join WG	Eva → include alternate in overview file on SharePoint, done ALL → control and choose their working groups
Action 4	Compare the SOS Loop in hydrogen to SOS loop process in methane (outside the TYNDP calculations)	Within the WG