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Scope 2 Technical Working Group Meeting

Meeting #15

June 4, 2025

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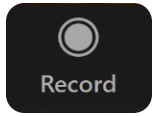

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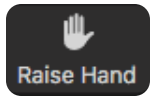

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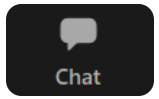

You can also use the chat function in the main control.

Recording, slides, and meeting minutes will be shared after the call.

Be mindful of sharing group discussion time; keep comments as succinct as possible.

Agenda

1. Housekeeping & goals for meeting
2. Feedback from ISB
3. Consequential subgroup update
4. Revised Draft Summary
5. Alternative Position submissions
6. Next steps

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Goals of today's meeting

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Goals of today's meeting

1. **Share feedback from ISB**

2. **Subgroup Proposal 1**
   - Overview/update

3. **Revision draft summary**
   - Understanding of the overall changes

4. **Alternative positions**
   - Transparency and awareness of alternative positions

ISB feedback

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May 21st ISB meeting – Feedback on Scope 2 revisions

The following slides summarize initial feedback from ISB members and is for informational purposes only. It does not represent a formal decision or consensus of the ISB.

The pulse check questions were used as an informal tool to gauge indicative support for key elements of the revision draft proposed direction. Results reflect the views of participating members at the time of the meeting and are subject to change as discussions progress.

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May 21st ISB meeting – Feedback on Scope 2 Inventory Revisions

ISB members were asked to provide directional input on the proposed revisions reflected in the consolidated Scope 2 draft.

Topic / Question	Yes	No	Abstain
1. Support revised location-based method direction?	6	0	3
2. Support revised market-based method direction?	7	0	2
3. Support requiring hourly matching for MBM contractual instruments?	6	0	3
*4. Support requiring deliverability for MBM claims? **	*8*	*0*	*3*
*5. Support requiring evidence of deliverability (vs. proof of delivery in all hours)? **	*11*	*0*	*0*

Takeaway: ISB members showed strong directional support for the Scope 2 revision draft, including unanimous backing for hourly matching under MBM. Feedback affirmed confidence in the overall framing, with recognition that implementation details remain critical.

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** Pulse check results from March 27th ISB meeting*

May 21st ISB meeting – Feedback Themes on Inventory Revisions

- **High-level support for the proposed LBM & MBM direction**
  - ISB members expressed agreement with the revision draft's overall direction, particularly the proposed updates to the market-based method.
  - This included strong support for anchoring MBM eligibility around hourly matching and deliverability. No objections were raised to these as core requirements, and there was recognition that the proposed framework includes flexibility mechanisms such as thresholds, exemptions, and estimated data to ensure implementation is feasible and proportionate.

- **Implementation design will remain a central area of focus**
  - Members noted that implementation details will be critical to the success of the proposed revisions.
  - This includes not only feasibility but also ensuring integrity and enabling real-world climate impact.
  - Several acknowledged that work on these elements is already underway within the TWG, and emphasized the importance of sustained progress to ensure the framework delivers on its goals in a practical and credible manner.

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May 21st ISB meeting – Feedback on Feasibility & Complementary Metrics

ISB members were also asked for directional input on key feasibility mechanisms.

Topic / Question	Yes	No	Abstain
6. Support including a load-based threshold for hourly matching?	6	0	3
7. Support a legacy clause to exempt existing contracts if transparently disclosed?	4	1	4
8. Support limited (5–10%) volumetric exemption if no impact framework exists?	3	3	3

Takeaway:
There was broad support for feasibility measures such as a consumption threshold and legacy clause for existing contracts, though some ISB members requested more detail.
Volumetric exemptions from quality criteria prompted more mixed feedback, noting it risks undermining the integrity of the reporting framework.

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May 21st ISB meeting – Feedback on Feasibility & Complementary Metrics

- **On Consumption Thresholds**
  - ISB members supported the principle of thresholds but raised concerns about organizational equity. While a threshold may cover the majority of electricity load, several members noted the need to consider how widespread exemptions by number of organizations could unintentionally signal that tracking emissions from smaller entities is less important.
  - Several ISB members emphasized that load-based exemptions must be paired with transparency and justification, particularly if small users are entirely exempt from requirements.
- **On Legacy Clauses**
  - There was support in principle, but multiple members noted the importance of implementation details, transparency, clear eligibility rules, and considerations for limits on how long legacy provisions apply.
- **On Volumetric Exemptions**
  - Some ISB members warned that volumetric carve-outs risk undermining the integrity of the reporting framework. Concerns included inconsistent application, reduced incentives for system improvements, and negative credibility impacts.

Subgroup proposal 1

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Consequential assessments support ambitious actions

- Inventory accounting methods may omit key relevant information about impacts of electricity consumption and clean energy procurement.
- Consequential accounting methods are better suited to inform decisions that reduce system-level emissions.
- Existing consequential accounting methods are not widely used and have significant feasibility issues that impact their adoption.
- Together, inventory and consequential methods can provide companies with a complete set of tools to tackle electricity-related emissions associated with both their physical grids, and in regions where investments can have the greatest impact.

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What is being proposed?

- A performance metric that incorporates aspects of consequential impact analysis, including the use of marginal emission rates that capture immediate and long-term impacts of actions.
- Formula: *induced consumption – avoided emissions = net impact*
- **Induced consumption** – MWhs of electricity consumption * marginal emission rates
- **Avoided emissions** – MWhs of electricity generation * marginal emission rates
  - Projects must meet additionality criteria to be counted toward avoided emissions totals
- All assessments are done for the reporting year activities only and include emissions impacts on the electricity sector specifically.

Summary of draft proposed revisions to the Scope 2 Standard

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Why We're Updating the Scope 2 Standard

- Scope 2 reporting has enabled widespread clean energy procurement, but credibility challenges have emerged.
- Significant variation in contractual mechanisms and differences across electricity markets have led to inconsistencies in how emissions are reported, reducing comparability, weakening stakeholder trust, and limiting alignment or adoption across disclosure and target-setting frameworks.
- While the status quo MBM was a pragmatic solution for early voluntary markets, growing evidence now indicates that its results are no longer scientifically robust in many real-world contexts—a key reason this update seeks to improve the alignment between reported inventory emissions and credible inventory claims.
- These updates don't disqualify impactful action, they clarify purpose. Inventory methods track what a company consumes. A new impact-based method will separately quantify broader system-level benefits. Together, these form a more accurate, transparent, and usable GHG accounting framework aligned with today's expectations and tomorrow's needs.

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High-Level Summary of draft revisions

Proposal for *Scope 2 Standard (inventory)*

- Stronger, clearer requirements for Location-Based Method (LBM) and Market-Based Method (MBM).
- LBM: Use most precise emission factors accessible as identified by spatial boundaries, temporal granularity and type (i.e., production or consumption).
- MBM: Require time-matching (hourly*) and deliverability for use of contractual instruments

Proposal for new electricity metric outside of *Scope 2 Standard (consequential)*

- "Marginal Emission Impact" metric under development to recognize broader grid effects of clean energy procurement and electricity load.
- Reported separately from Scope 1, 2, 3 inventories, designed to inform impact and grid decarbonization, outside of quantifying organizational emissions.

**Can use estimated data and includes exemptions for smaller users described on slides 22-23*

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What the Updated Scope 2 Framework and New Impact Metrics Enable

- A unified system with two parts:
  - **Inventory updates** for more accurate, consistent emissions reporting
  - **Impact metric** to recognize broader climate benefits of clean energy globally
- More credible, science-aligned accounting for electricity use
- Stronger alignment with disclosure, target-setting, and regulatory programs
- Clearer signals to markets about what counts as meaningful progress
- A practical transition path that supports feasibility and honors early action

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Summary of key Location-Based Method Revisions

- Clarifies LBM purpose as a grid-intensity inventory method, supporting transition risk assessment and abatement planning.

- Updates emission factor hierarchy based on:
  1. Spatial boundaries
  2. Temporal granularity
  3. Emission factor type (prioritizing consumption-based, inclusive of imports)

- Requires use of the most precise emission factor accessible for which activity data is also available.

- Defines "accessible" as publicly available, free to use, and from a credible source.

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Summary of key Market-Based Method Revisions

- Clarifies MBM purpose as an inventory method that reflects energy consumption matched with generation, whether through contractual instruments or residual mix, enabling abatement planning and supporting clean energy market development.
- Strengthens quality criteria for contractual instruments:
  - Hourly matching (required above a threshold; estimated hourly use allowed)
  - Deliverability (same market boundary or meets criteria to demonstrate deliverability)
- Enables estimated data for hourly matching to support feasibility and broad implementation.
- Introduces Standard Supply Service globally to ensure fair, proportionate claims for shared, regulated, or publicly funded generation, allocating only a reporter's rightful share and preventing inflated claims.
- Requires fossil-based emission factor where residual mix is unavailable, to prevent over-crediting and reinforce conservative defaults. Excludes Standard Supply Service and voluntary claims from residual mix to avoid double counting.

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Deliverability requirements for contractual instruments

*All contractual instruments used in the market-based method for scope 2 accounting **shall** be sourced from the same market boundary in which the reporting entity's electricity-consuming operations are located and to which the contractual instrument is applied, or otherwise meet criteria deemed to demonstrate deliverability to the reporting entity's electricity-consuming operations.*

- Market boundaries are based on the principle of deliverability, informed by physical interconnection or coordinated market operations (e.g., synchronized transmission, regional dispatch, power pools, etc.)
- Substantive boundary definitions are under development, informed by regional grid and market operational characteristics
- Outside a defined boundary, deliverability may be demonstrated through:
  - Price-based method: Attributes paired with evidence of excess transmission capacity (e.g., electricity price differentials between adjacent markets)
  - Contract-based method: Attributes paired with contracts or instruments that demonstrate physical delivery from the point of generation to the point of consumption

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Hourly matching requirements for contractual instruments

*All contractual instruments used in the market-based method for scope 2 accounting **shall** be issued and redeemed for the same hour as the energy consumption to which the instrument is applied, except in certain cases of exemption where monthly or annual matching may be used.*

- Profiles
  - Hourly matching can use estimated data ("profiles") to represent how electricity is used or generated over time when direct hourly measurements aren't available.
  - These profiles based on typical usage or production patterns can come from utilities, suppliers, or public sources, and cover both consumption and generation.
  - Using profiles makes hourly matching significantly more feasible, even without advanced metering.

- Exemptions
  - Organizations below a defined annual load threshold may use contractual instruments issued and redeemed for the same month or year as the associated energy consumption, instead of hourly matching.

Load Profiles in Practice – Common Data Inputs and Industry Use

- **What are Load Profiles?**
  - Load and generation profiles are widely used across the energy industry by utilities, grid operators, and project developers, often in settings with major financial stakes.
  - Profiles help estimate how electricity is used or generated across hours when direct metered data isn't available.
  - This practice is well-established, with research showing accuracy for most applications.

- **Examples of Load Profile Types** (under development):
  - Facility-specific or metered historical load profiles
  - Supplier- or utility-provided profiles
  - Standard customer-type profiles by geography or sector
  - Time-of-use rates or regulatory tariff profiles
  - Flat load shape (e.g., total annual use ÷ 8760 hours)

Feasibility considerations – Exemptions to revised requirements for contractual instruments

- **Legacy Contract Clause**

  TWG and ISB polling show support for allowing long-term contracts signed before the update to retain eligibility under defined conditions. Disclosure of these contracts when used in an inventory is also supported. Specific terms and requirements are still under development.

- **Volumetric Exemptions**

  Mixed TWG and ISB feedback. Under discussion as a limited option (e.g., 5–10%), but significant concerns remain around alignment with quality criteria and credibility. Support decreases when an impact-based metric offers an alternative way to recognize clean energy actions.

- **Phasing-In of New Requirements**

  The Secretariat and ISB are exploring how phase-in measures can support implementation across diverse users and markets. Any phase-in would occur after finalization of the Corporate Standard revision, currently expected at the end of 2027.

Alternative Positions

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Alternative Proposals – Purpose and Process

- **Purpose & Scope**: Provide a transparent path for TWG members to submit materially different approaches to key elements of the LBM+MBM framework that did not gain majority support in TWG polling or ISB pulse checks.

- **Process Launched**: Initiated via May 1 email to TWG with submission guidance to document alternative perspectives constructively and concisely, including a brief summary, rationale (linked to GHGP Decision-making Criteria Hierarchy), and optional implementation suggestions.

- **Outcome**: All alternatives (see supplementary material) will be included in the July Scope 2 decision package submitted to the Independent Standards Board for formal review and decision on whether to proceed to public consultation.

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Ten Alternative Proposals received

1. Accounting Definitions and Use of Consequential Accounting in Scope 2
2. Measure Impact Instead of Matching MWhs
3. Require Project-Based (Avoided Emissions) Reporting
4. Define Market Boundaries Using Policy-Based Frameworks
5. Require Annual Matching and "Reasonable Geographic Links"; Clarify but Do Not Require or Recommend Hourly Matching or Deliverability Criteria as Proposed
6. Addressing Inconsistency Between Current Market-based Rules and Value Chain Inventory
7. Add Incrementality Requirement for Voluntary Claims
8. Introduce Tiered Disclosure for MBM Impact
9. Support Temporary Phase-In, Oppose Ongoing Exemptions
10. Use SME Status Instead of Load to Define Hourly Matching Exemptions

Next steps

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Next steps

- **Next meeting: June 25th**, 17:00 EDT / 23:00 CEST / (+1) 05:00 CST

- **The June 25th meeting will serve as a checkpoint to test TWG directional alignment across key revision areas and inform ISB decision-making and public consultation planning.**

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Thank you!

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Supplementary slides

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Alt Proposal 1 - Accounting Definitions and Use of Consequential Accounting in Scope 2

Summary of the alternative approach:
Proposes that the MBM is a form of "performance accounting", not "physical inventory accounting". Recommends creating a new performance metrics category outside the inventory total for MBM and consequential methods.

Rationale and concerns addressed:
Asserts that current Scope 2 structures conflate fundamentally different accounting approaches. Recommends clearer definitions to avoid inconsistency and support more accurate, comparable reporting. Emphasizes the need to distinguish inventory accounting (based on physical flows) from impact- or action-oriented metrics, which should be treated separately as performance metrics.

Suggested implementation pathway:

- Introduce formal definitions distinguishing physical, attributional, and performance accounting.
- Reclassify MBM as a performance metric outside the GHG inventory total.
- Present MBM and consequential approaches within the performance metric category for public comment.
- Use consultation feedback to select only one or narrow to a smaller set for final standard.
- Apply performance metric reporting to companies above certain thresholds (e.g., size, market) under defined conditions.

Alt Proposal 2 - Measure Impact Instead of Matching MWhs

Summary of the Alternative Approach:
Proposes replacing activity-based MWh matching with a marginal impact-based method equivalent to the consequential framework under development by the TWG subgroup. It calculates the net of induced emissions from consumption and avoided emissions from clean energy procurement using marginal emissions factors (e.g., build and operating margins). This would shift away from tracking contractual electricity delivery or physical proximity, instead quantifying the projected system-level impact of procurement and consumption choices.

Rationale and Concerns Addressed:
Contends that evaluating the estimated emission changes caused by procurement and consumption decisions rather than allocating existing grid emissions is the more decision-useful objective for Scope 2 inventory accounting. Asserts that MWh-matching, even with increased granularity, cannot capture system-level effects, while marginal impact methods better reflect the net emissions consequences of consumption and clean energy purchases.

Suggested Implementation Pathway:
Replace the MBM inventory with a method that:

- Align with consequential subgroup methodologies, including marginal EF selection and additionality criteria
- Report net emissions as induced emissions from consumption minus avoided emissions from clean energy.

Alt Proposal 3 – Require Project-Based (Avoided Emissions) Reporting

Summary of the Alternative Approach:
For consequential accounting, proposes replacing the 'may' language in the Scope 2 Guidance with a 'shall' requirement to report avoided emissions using project accounting (e.g., Grid-Connected Electricity Project Guidelines). This complements inventory totals with an evaluation of emissions changes resulting from procurement actions.

Rationale and Concerns Addressed:
Notes that inventory-only reporting may not capture whether corporate actions reduce actual emissions. Requiring project-based reporting would enhance transparency, demonstrate system-level impacts, and support better-informed decisions.

Suggested Implementation Pathway:

- Amend Scope 2 Guidance to require reporting of avoided emissions per project-based methodology (e.g., GHG Project Protocol, Grid-Connected Electricity Guidelines).
- Focus on actions with material emissions impacts, applying a risk-based filter to exclude minor changes.

Alt Proposal 4 - Electricity Sector Boundaries Defined by Regulatory Jurisdiction

Summary of the alternative approach:
Proposes defining market boundaries based on national or multinational "electricity sectors" recognized by policy or regulatory frameworks for energy attribute certificate (EAC) trading, regardless of whether physical electricity delivery is possible. This would replace the revision draft's approach requiring evidence of deliverability between electricity generation and consumption.

Rationale and concerns addressed:
Asserts that policy-based boundaries better reflect how EAC markets operate, align with legal structures, and support voluntary renewable demand. Physical deliverability criteria are viewed as scientifically inaccurate, inconsistent with market practices, and potentially harmful to renewable project financing, particularly where access to generation is geographically constrained.

Suggested implementation pathway:

- Revise Criterion 5 to define markets based exclusively on legally recognized EAC systems.
- Allow inventory claims across non-interconnected grids if cross-border attribute trading is permitted by policy.

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Alt Proposal 5 - Require Annual Matching and "Reasonable Geographic Links"*; Clarify but Do Not Require or Recommend Hourly Matching or Deliverability Criteria as Proposed

Summary of the Alternative Approach:
Proposes that Quality Criteria 4 & 5 adopt "may" language making hourly and geographic matching fully optional and explicitly opposing "should" recommendations. Opposes exemption thresholds as unnecessarily complex and calls for legacy contract recognition, as necessary.

* *"Reasonable Geographic Links"* is a placeholder pending group discussion and definition.

Rationale and Concerns Addressed:
Raises concern that that required granular matching could reduce participation due to high complexity, cost, and data gaps especially for smaller or global companies. Suggests *optional* matching avoids one-size-fits-all rules while seeking to improve transparency through *required* disclosure of matching level (e.g., "hourly" or "annual").

Suggested Implementation Pathway:
- Retain current annual matching and policy-defined market boundaries as default requirements
- Permit but do not require or recommend granular matching in Criteria 4 & 5
- Require disclosure of the time and location matching level used in reporting
- Maintain recognition of legacy contracts and allow optional transition to granular approaches

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Alt Proposal 6 - Addressing Inconsistency Between Current Market-based Rules and Value Chain Inventory

Summary of the alternative approach:
Asserts that the market-based method, even as revised, is inconsistent with the definition of a value chain GHG inventory because a value chain inventory is for processes used in the value chain, and mass balance is not sufficient for use claims. Two proposed solutions:

- Reframe MBM as "performance accounting" to be reported outside of value chain inventory.
- Introduce a causality requirement so MBM can align with value chain inventory.

Rationale and concerns addressed:
States that MBM, as currently designed, enables misleading claims (e.g., using 100% renewables via certificate matching without causal link). Asserts this undermines accuracy, transparency, and trust in inventory reporting. Reframing MBM or requiring causality is proposed to align with principles of scientific integrity and reporting credibility, while reducing legal and reputational risk.

Suggested implementation pathway:
In both cases provide clear interpretive guidance and claims restrictions for MBM disclosures:

- Option 1 – Define MBM as performance accounting (separate from value chain inventory)
- Option 2 – Require a causal relationship between procurement and generation for inclusion in inventory

Alt Proposal 7 - Add Incrementality Requirement for Voluntary Claims

Summary of the Alternative Approach:
Proposes that voluntary procurement above and beyond Standard Supply Service in the MBM must meet an incrementality requirement. Specifically, eligible clean energy resources should be new, e.g., less than 3 years old at the start of the contract. This proposal contends that such a requirement is necessary to ensure MBM claims reflect the actual deployment of new clean energy, rather than the reallocation of existing carbon-free energy (CFE) that would have been generated regardless.

Rationale and Concerns Addressed:

Asserts that without incrementality, companies may claim zero-carbon electricity without driving new clean energy deployment, weakening MBM credibility and climate impact. The proposal contends that requiring incrementality would strengthen integrity, ensure claims reflect new resource additions, align with U.S./EU hydrogen rules, and support fairer allocation by avoiding over-claiming of existing CFE resources.

Suggested Implementation Pathway:

- Amend MBM eligibility criteria to include an incrementality threshold for additional voluntary claims beyond SSS.
- Consider aligning with thresholds used in other policy frameworks.

Alt Proposal 8 - Introduce Tiered Disclosure for MBM Impact

Summary of the alternative approach:
Proposes that MBM disclosures differentiate between high- and low-impact procurement actions by introducing "tiers" of reporting (e.g., separating long-term PPAs from unbundled EACs) to improve transparency and avoid overstating climate impact.

Rationale and concerns addressed:
Raises concerns that the current MBM treats all instruments equally, which may dilute incentives for impactful procurement and mislead stakeholders. Tiered reporting is presented to:

- Align disclosures with emissions impact
- Improve credibility for investors and decision-makers
- Avoid misleading comparisons across procurement strategies

Suggested implementation pathway:

- Introduce tiers distinguishing direct- and indirect-impact instruments
- Clarify instrument types within each tier
- Make tiered MBM reporting a visible, part of disclosure regardless of other impact metrics used

Alt Proposal 9 – Support Temporary Phase-In, Oppose Ongoing Exemptions

Summary of the Alternative Approach:
Proposes that all reporting organizations ultimately follow the same updated Scope 2 accounting standards to ensure consistency, accuracy, and integrity. While a phase-in period and limited accommodations (e.g., for legacy contracts or smaller entities) are supported to enable feasibility, the proposal rejects permanent exemptions or optional reporting pathways that allow continued use of less accurate methods.

Rationale and Concerns Addressed:
Contends that exemptions and optional methods enable cherry-picking, distort incentives, and undermine the comparability and scientific credibility of inventories. The proposal emphasizes that accounting standards must reflect actual deliverability, timing, and emissions ensuring inventories and impact disclosures are both relevant and reliable, and that the Protocol supports meaningful decarbonization efforts.

Suggested Implementation Pathway:
- Eliminate perpetual exemptions and remove long-term optional reporting pathways.
- Define a clear phase-in schedule for updated requirements based on reporter size, market, or capability.
- Apply consistent standards across all entities once the phase-in is complete.

Alt Position 10 - Use SME Status Instead of Load to Define Hourly Matching Exemptions

Summary of the Alternative Proposal:

Proposes applying hourly matching requirements only to companies that exceed SME thresholds (based on headcount, revenue, or assets), rather than using electricity consumption as the basis.

Rationale and Concerns Addressed:

Contends that company size is a more accurate proxy for implementation capacity than load. Suggests this avoids arbitrary cutoffs, improves consistency, and better addresses feasibility.

Suggested Implementation Pathway:

Replace load-based thresholds in data quality tables with SME-based criteria, using standardized or regionally accepted definitions. Fine-tune as needed to ensure global applicability.