**3GPP TSG-SA5 Meeting #156S5-245169**

Maastricht, Netherlands, 19-23 August 2024

3GPP TSG-SA Meeting #105 Tdoc <DocNumber>

Melbourne, Australia, 10 - 13 September 2024

**Title: Presentation of Report to TSG: TR 28.880, Version 0.4.0**

**Source: SA WG5**

**Document for: Information**

**Abstract of document:**

This technical report investigates the opportunities for defining new energy related information, new Energy Consumption (EC) KPIs, new Energy Efficiency (EE) KPIs and new Energy Saving (ES) solutions for 5G. It identifies and documents use cases and requirements related to energy related information (e.g. carbon emission, carbon emission efficiency, renewable energy factor), energy consumption, energy efficiency and energy saving. It documents and evaluates potential solutions, and provides recommendations for the normative work.

**Changes since last presentation to TSG SA #104:**

This is the first presentation.

**Outstanding Issues:**

The following use cases lack of potential solutions:

* Use case #1: Estimation of containerized VNF/VNFC energy consumption
* Use case #3: Enabling renewable energy consumption and carbon emission information reporting
* Use case #5: Estimating averaged gNB energy consumption per UE
* Use case #8: Energy saving by converting QoS of a service
* Use case #9: Renewable energy enabling NF re-selection (new use case introduced at SA5#156)
* Use case #11: Handling of power shortages (new use case introduced at SA5#156)

**Contentious Issues:**

None.