**3GPP TSG SA WG5 Meeting #156 S5-244734**

**Maastricht, The Netherlands 19 - 23 August 2024**

**Source: China Mobile**

**Title: TR 28.880 Add use case of renewable energy enabling NF re-selection**

**Document for: Approval**

**Agenda Item: 6.19.20**

# 1 Decision/action requested

***In this box give a very clear / short /concise statement of what is wanted.***

# 2 References

[1] 3GPP draft TR 28.880: “Management and orchestration; Study on energy efficiency and energy saving aspects of 5G networks and services v0.4.0”.

# 3 Rationale

This contribution proposes to add a new use case of Renewable energy enabling 5GC NF re-selection for TR 28.880.

# 4 Detailed proposal

|  |
| --- |
| **First Change** |

## 5.x Use case #X: Renewable energy enabling 5GC NF re-selection

### 5.X.1 Description

To cut down on emissions and increase network efficiency, operators have an interest in powering their network using renewable energy sources. It is also important for operators to understand and track the proportion of energy consumed in their networks that is sourced from renewable sources, which can be utilized by the operators to decide to deploy 5GC NFs which can be powered by renewable energy, such as optimizing the energy utilization of UPFs, which powered by either renewable or non-renewable energy sources.

By incorporating UPFs that utilize renewable energy sources, the 3GPP management system can manage and adjust the working mode of the UPFs (e.g., turn on or turn off), which are powered by either renewable or non-renewable energy sources. This can allow the 5GC to utilize renewable energy for optimization..

### 5.x.2 Potential requirements

**REQ-5GC renewable\_energy-01**

The 3GPP management system should be able to report the renewable energy consumption information of a 5GC NFs to an authorized MnS consumer.

|  |
| --- |
| **End of Changes** |