APPENDIX I: POWER REDUCTION VERIFICATION

Per the May 2017 TCBC Workshop Notes, demonstration of proper functioning of the power reduction mechanisms is required to support the corresponding SAR configurations. The verification process was divided into two parts: (1) evaluation of output power levels for individual or multiple triggering mechanisms and (2) evaluation of the triggering distances for proximity-based sensors.

I.1 Power Verification Procedure

The power verification was performed according to the following procedure:

1. A base station simulator was used to establish a conducted RF connection and the output power was monitored. The power measurements were confirmed to be within expected tolerances for all states before and after a power reduction mechanism was triggered. For licensed modes, the device state index as displayed on the device UI was recorded before and after the mechanism was triggered.

2. Step 1 was repeated for all relevant modes and frequency bands for the mechanism being investigated.

3. Steps 1 and 2 were repeated for all individual power reduction mechanisms and combinations thereof. For the combination cases, one mechanism was switched to a 'triggered' state at a time; powers were confirmed to be within tolerances after each additional mechanism was activated.

See original filing for all other operations that were not evaluated in this permissive change.

I.2 Main Antenna Verification Summary

Table I-1
Power Measurement Verification for Main Antenna

Mechanism(s)	Mode/Band	Device State Index (DSI)	
1st		Free Space	Mechanism #1
Held-to-Ear	NR TDD Band 77 (PC2) DoD Ant. G	0	2
Held-to-Ear	NR TDD Band 77 (PC2) Ant. G	0	2

*Note: This device uses different Device State Indices (DSI) to configure different time averaged power levels based on certain exposure scenarios. For this device DSI = 2 represents the case where the device is held to ear. DSI = 0 is configured at max power when the device cannot detect the use condition.