DR453 points out the use of true and false in 7.17.8 when the flag is defined to only have two values representing the set and clear states. Unfortunately, the terms set and clear have ambiguous meanings. This proposal attempts to resolve the DR by make references to the state of set or clear more explicit.

Suggested Technical Corrigendum

In 7.17.8 Atomic flag type and operation paragraph 1 replace

It has two states, set and clear.

with

it has two states, **set** and **clear**.

In 7.17.8.1 The atomic_flag_test_and_set functions paragraph 2 replace

Atomically, sets the value pointed to by **object** to true.

with

Atomically, sets the value pointed to by **object** to the **set** state if it was previously **clear**.

In 7.17.8.1 The atomic_flag_test_and_set functions paragraph 3 replace

Atomically, the value of the object immediately before the effects.

with

Atomically, returns false if the value of the object had been **clear** before the effects, true otherwise.

In 7.17.8.2 The atomic_flag_clear function paragraph 2, replace

Atomically sets the value pointed to by **object** to false.

with
Atomically clears the value pointed to by object to the **clear** state.