

Proposal for C2Y
WG14 N3560

Title: Improved language for `powr(x,y)` with $x < 0$
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Proposal category: Editorial
Reference: N3550

Rationale:

This change addresses issue #1011 raised by Joseph Myers on 18 March 2025. It adds a phrase to reinforce the intention that the condition holds regardless of the second argument, even if it's a NaN. With this change, the specification of `powr` becomes consistent with two similar cases, `rootn` (F.10.5.8) and `csqrt` (G.4.5.2).

This change requires no implementation changes.

Suggested change:

`powr` – change to case F.10.5.7#7

`powr(x, y)` returns a NaN and raises the "invalid" floating-point exception for $x < 0$ and all y (including NaN).