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We show that a reversible Horn–Jackson generalized mass action kinetics system satisfying Wegscheider’s condition is detailed balanced if and only if it is complex balanced. In other words, under *formal* balancing conditions for the cycles (of the underlying undirected graph) of the reaction graph, both notions coincide. We formulate this property in terms of the algebraic equations defining the corresponding varieties in rate constant space. (Received February 04, 2009)