Introduction (translated from the Russian): “Dominance solution is a new and very promising concept in game theory. The procedure for dominance solution of a game in normal form consists in the successive exclusion by all players of dominated (i.e., a fortiori bad) strategies. If, as a result, each player $i$ has one strategy $x_i$, then the game is said to be dominance solvable (DS), and the point $x = (x_1, \cdots, x_n)$ thus obtained is the $D$-equilibrium. The principal advantage of this concept compared to other concepts of equilibrium is that a universal uniqueness theorem exists for it. But with existence theorems, the situation is far worse. Until recently DS has been proved only for positional games with complete information. D. Gabay and H. Moulin [in *Applied stochastic control in econometrics and management science*, 271–293, North-Holland, Amsterdam, 1980; MR0604934] made an attempt to obtain a criterion for local DS of concave $n$-person games. They considered the Nash equilibrium point $x$ and the linear operator $T$ obtained by the linearization at $x$ of the so-called best response operator. A game is said to be locally DS at point $x$ if some neighborhood of $x$ is a DS game, and the point $x$ itself is a $D$-equilibrium. They stated [op. cit., Theorem 7.1] that for the local stability of $x$, as well as for the local DS at $x$, it is necessary that $\rho(T) \leq 1$ and sufficient that $\rho(T) < 1$, where $\rho(T)$ is the spectral radius of the linear operator $T$, i.e., the maximum of the absolute values of its eigenvalues. We show, however, that the inequality $\rho(T) < 1$ is sufficient for local DS only in the case of two players. In the general case we obtain a sufficient condition that reduces to the inequality $\rho(T^+) < 1$ for some linear operator $T^+$ that is very simply connected with $T$. In the case when the strategy spaces of all players are one-dimensional, the inequality $\rho(T^+) \leq 1$ is necessary for local DS. We obtain similar results for global DS when the payoff functions of all players contain only linear and quadratic terms.”