1046-30-457 **Alexander L Volberg*** (volberg@math.msu.edu), Dept. of Math., Michigan State Univ., East Lansing, MI 48823, and **Peter Yuditskii** (yuditskii@math.msu.edu), Dept. Math., Michigan State Univ., East lansing, MI 48823. *Nehari's problem and matrix A_2. Alexander Volberg and Peter Yuditskii.*

We consider Nehari's problem in the case of non-uniqueness of solution. The solution set is then parametrized by the unit ball of H^∞ by means of so-called *regular generators* — bounded holomorphic functions ϕ. The definition of *regularity* is given below, but let us mention now that 1) the following assumption on modulus of ϕ is sufficient for *regularity*: $\frac{1}{1-|\phi|^2} \in L^1(\mathbb{T})$; 2) there is no necessary and sufficient condition of *regularity* on bounded holomorphic ϕ in terms of $|\phi|$ on $\mathbb{T}$, this is the result of A. Kheifits. This makes reasonable the attempt to find a weaker sufficient condition on $|\phi|$ than the condition in 1). This is done here. Also we are discussing certain new necessary and sufficient conditions of *regularity* in terms of bounded mean (weighted) oscillations of ϕ. They involve the matrix A_2 condition of Treil-Volberg. (Received September 03, 2008)