This paper presents an integrated distribution locational marginal pricing (DLMP) method designed to alleviate congestion induced by electric vehicle (EV) loads in future power systems. In the proposed approach, the distribution system operator (DSO) determines distribution locational marginal prices (DLMPs) by solving the social welfare optimization of the Electric distribution system which considers EV aggregators as Price takers in the local DSO market and demand price elasticity. Nonlinear optimization has been used to solve the social welfare optimization problem in order to obtain the DLMPs. The efficacy of the proposed approach was demonstrated by using the bus 4 distribution system of the Roy Billinton Test System (RBTS) and Danish driving data. The case study results show that the integrated DLMP methodology can successfully alleviate the congestion caused by EV loads. It is also shown that the socially optimal charging schedule can be implemented through a decentralized mechanism where loads respond autonomously to the posted DLMPs by maximizing their individual net surplus.