Label the edges arbitrarily as $e_1, \ldots, e_m$ with the property that $e_{m-n+1}, \ldots, e_m$ belong to T. Let δ be the minimum difference between any two non-equal edge weights; subtract $\delta i/n^3$ from the weight of edge i. Note that all edge weights are now distinct, and the sorted order of the new weights is the same as some valid ordering of the original weights. Over all spanning trees of G, T is the one whose total weight has been reduced by the most; thus, it is now the unique minimum spanning tree of G and will be returned by Kruskal's algorithm on this valid ordering.

[1] ex750.114.241