First, the two main categories of Figure 1, in the second-level hierarchy, are compared with respect to their perceived relative importance to the goal. The qualitative pairwise assessments, numerically represented by a 0 to 10 scale, are qualitatively defined in Table D1. The actual judgments are documented in numerical matrix form in the Expert Choice files which provide an auditable decision basis. For example, it was judged that the SOCIO/ECONOMIC AND POLITICAL STATUS was MODERATELY MORE IMPORTANT than TECHNOLOGICAL CRITERIA RELEVANT TO AN UNDECLARED FACILITY. After assessing the main categories, the sub-categories are then similarly judged, each with respect their corresponding main categories. These comparisons are also all subjective in this example.

Comparisons at each other hierarchy level, including the state types, are then made, on a pairwise, usually subjective basis, relative to each other, with respect to the above connecting sub-category. The overall rankings of the states are then obtained from all the above subjective input data by using the program, for the last analysis stage.

TABLE D1: The Verbal and Numerical Judgment Scale Used in Decision Analysis

Numerical Scale	Verbal Scale	Explanation
1.0	Equal importance of both elements	Two elements contribute equally to the consequence.
3.0	Moderate importance of one element over another	Experience and judgment favor one element over the other.
5.0	Strong importance of one element over another	An element is strongly favored.
7.0	Very strong importance of one element over another	An element is very strongly favored.
9.0	Extreme importance of one element over another	An element is favoured by at least an order of magnitude.
2.0, 4.0 6.0, 8.0	Intermediate values between two adjacent judgments	Used for compromise between two judgments.
Increments of 1.0	Intermediate value	Used for finer graduation of judgment in increments of 0.1.

D.3.3   Number of Comparisons

If there are n items, below a given node, to be pairwise compared, then the number of individual pairwise judgments to be entered will be (n)(n - 1) / 2. For example, if there are item comparisons where n = 3, there will then be three judgments to enter.