The language is considered non-regular because it necessitates the machine to retain an indefinite number of characters (represented by the string 'w') and subsequently verify that this precise sequence reoccurs later in the string. Regular languages are inadequate for such scenarios as finite automata, the machines that recognize regular languages, lack the capacity to store an arbitrary sequence of characters. They can only manage a fixed number of states, which proves insufficient for the task of comparing two potentially unlimited strings to ensure their exact match.