For an o-minimal structure $\mathcal{M}$ expanding a group and a new convex predicate $U$, we define $T$-resistance for the pair $(\mathcal{M}, U)$, a generalization of $T$-convexity. Using $T$-resistance and building on results of L. van den Dries and A. Lewenberg, we show that for a properly convex subset $U$, the theory of the expanded structure $\mathcal{M}' = (\mathcal{M}, U)$ has definable Skolem functions precisely when $\mathcal{M}'$ is valuational. In addition we present some insight about a particular algorithm for computing these functions when they are present. (Received September 16, 2016)