

electron back-transfer

Thermal inversion of excited-state electron transfer restoring the donor and acceptor in their original oxidation state. In using this term one should also specify the resulting electronic state of the donor and acceptor. This term is preferred to back electron-transfer.

Notes:

1. It is recommended to use this term only for the process restoring the original electronic state of donor and acceptor.
2. Should the forward electron transfer lead to charge separation, electron back-transfer will result in charge recombination.

Source:

PAC, 2007, 79, 293 (*Glossary of terms used in photochemistry, 3rd edition (IUPAC Recommendations 2006)*) on page 329