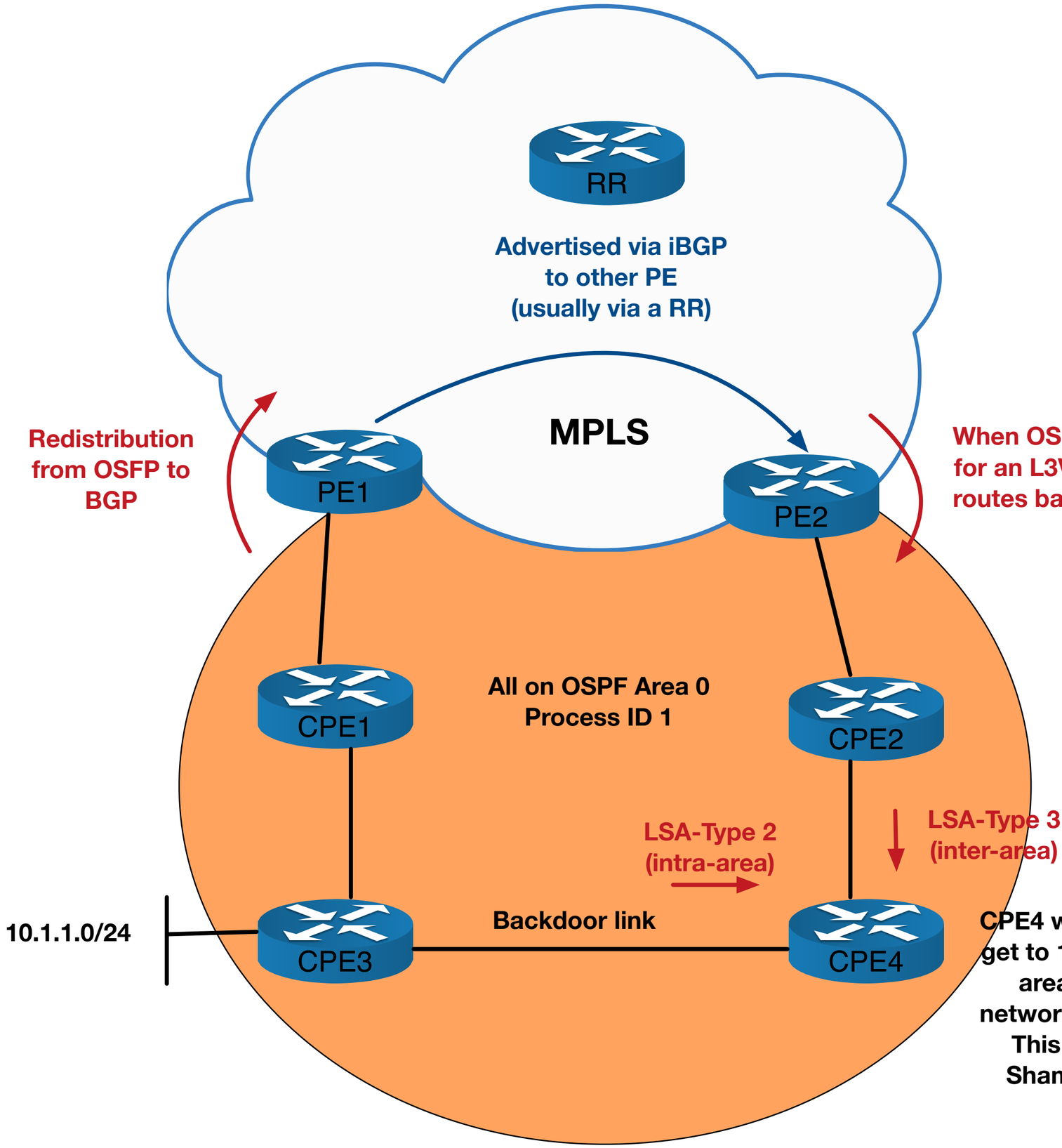
OSPF Sham Links

This diagram shows a scenario whereby a sham link may be required



When OSPF is used as the PE-CE routing protocol for an L3VPN MPLS solution, BGP will redistribute routes back into OSPF as type 3 LSAs (rather than the type 5 LSAs)*

*unless the Domain ID extended community in the vpnv4 route does not match the OSPF process ID, in which case it will be advertised as a type 5 LSA

CPE4 will prefer the LSA Type 2 to get to 10.1.1.0/24, since it is intra-area. This means the MPLS network is only used as a backup. This is could be undesirable. Sham links resolve this issue.