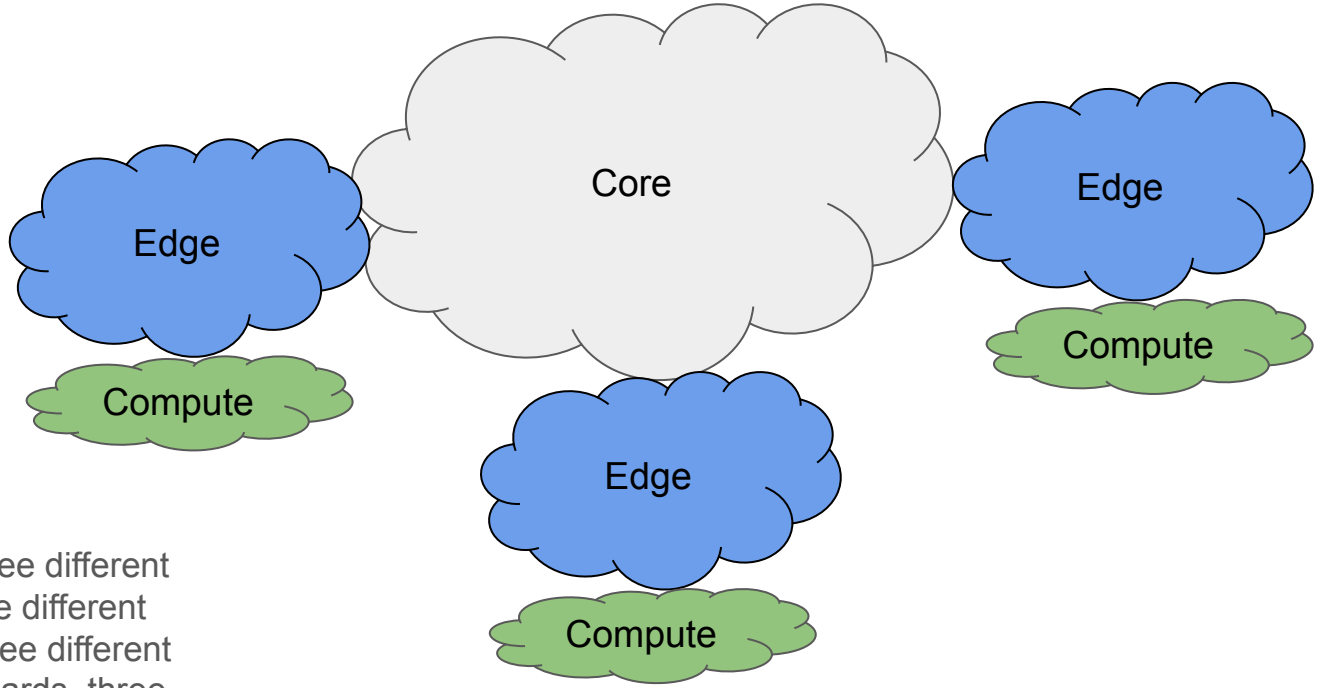
SRv6 on Hosts

Network and Compute Integration

Abstract

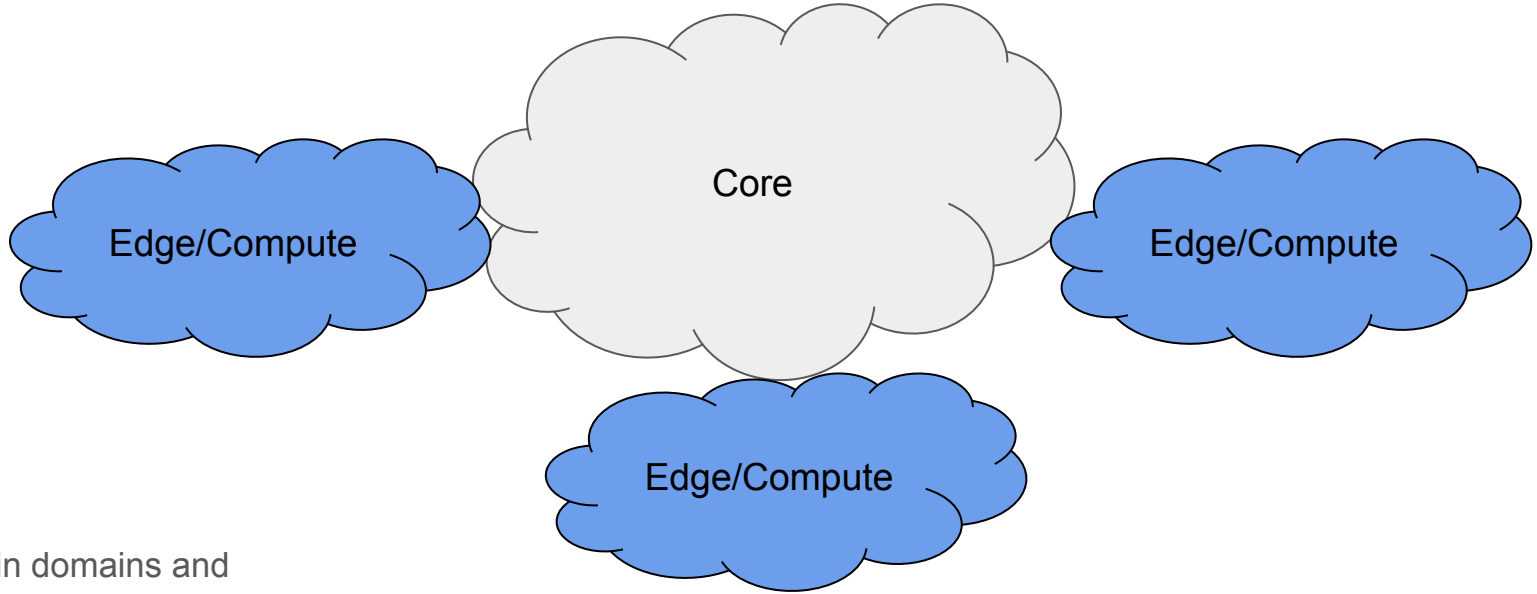
Compute infrastructure is generally disconnected from the IP infrastructure at a protocol level and requires the network gear to maintain high scale and feature capability. In order to produce better price points for the IP gear and allow compute vision into the greater network, the encapsulation points must move to the host and the host must fully integrate into the IP “fabric.”

High Level Network Visualization



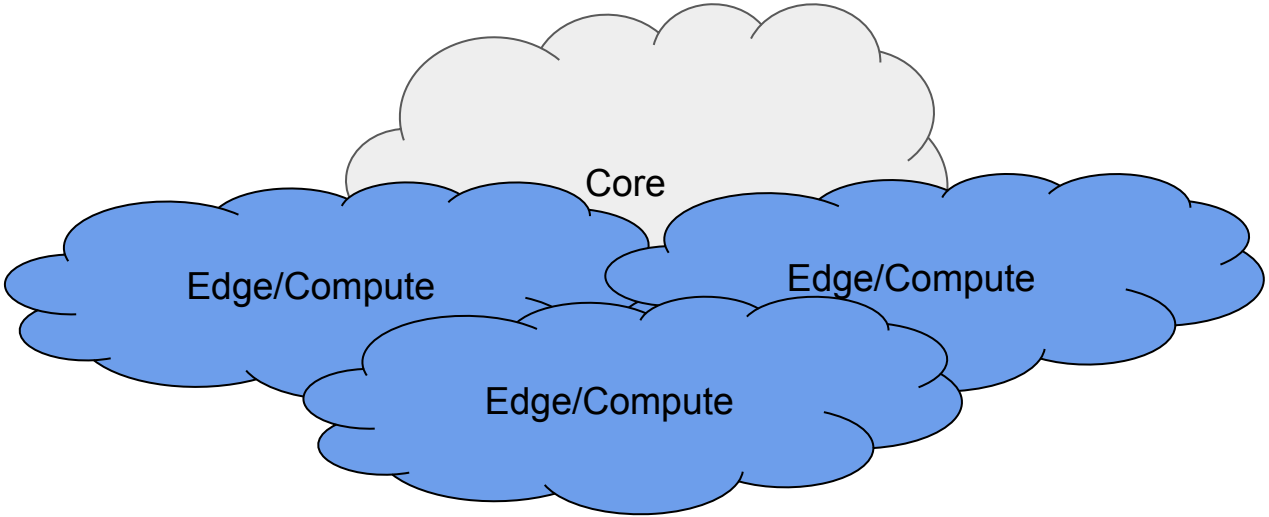
For end-to-end, three different domain types, three different encapsulations, three different configuration standards, three different traffic engineering(TE) problems

Host/Network Integration P1



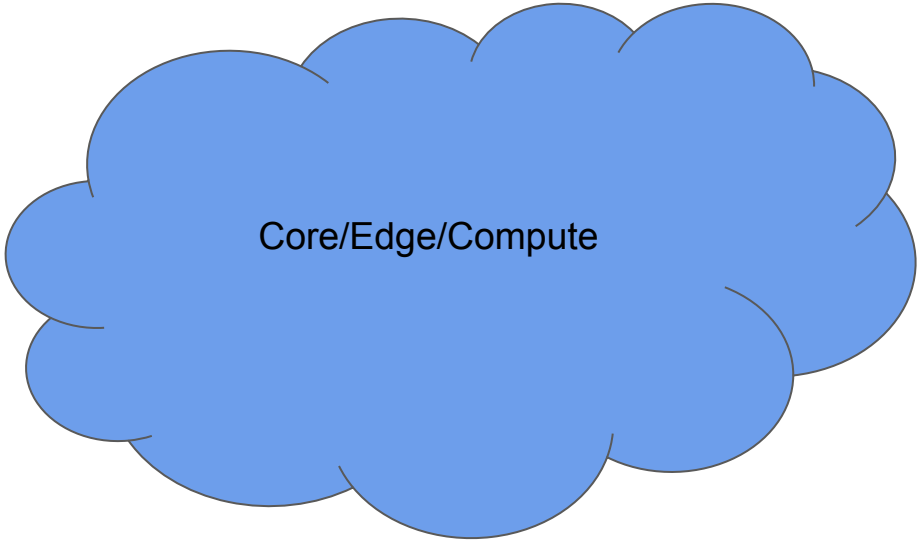
Reduction in domains and encapsulation, more standardized configurations and TE is simplified in domain

Host/Network Integration P2



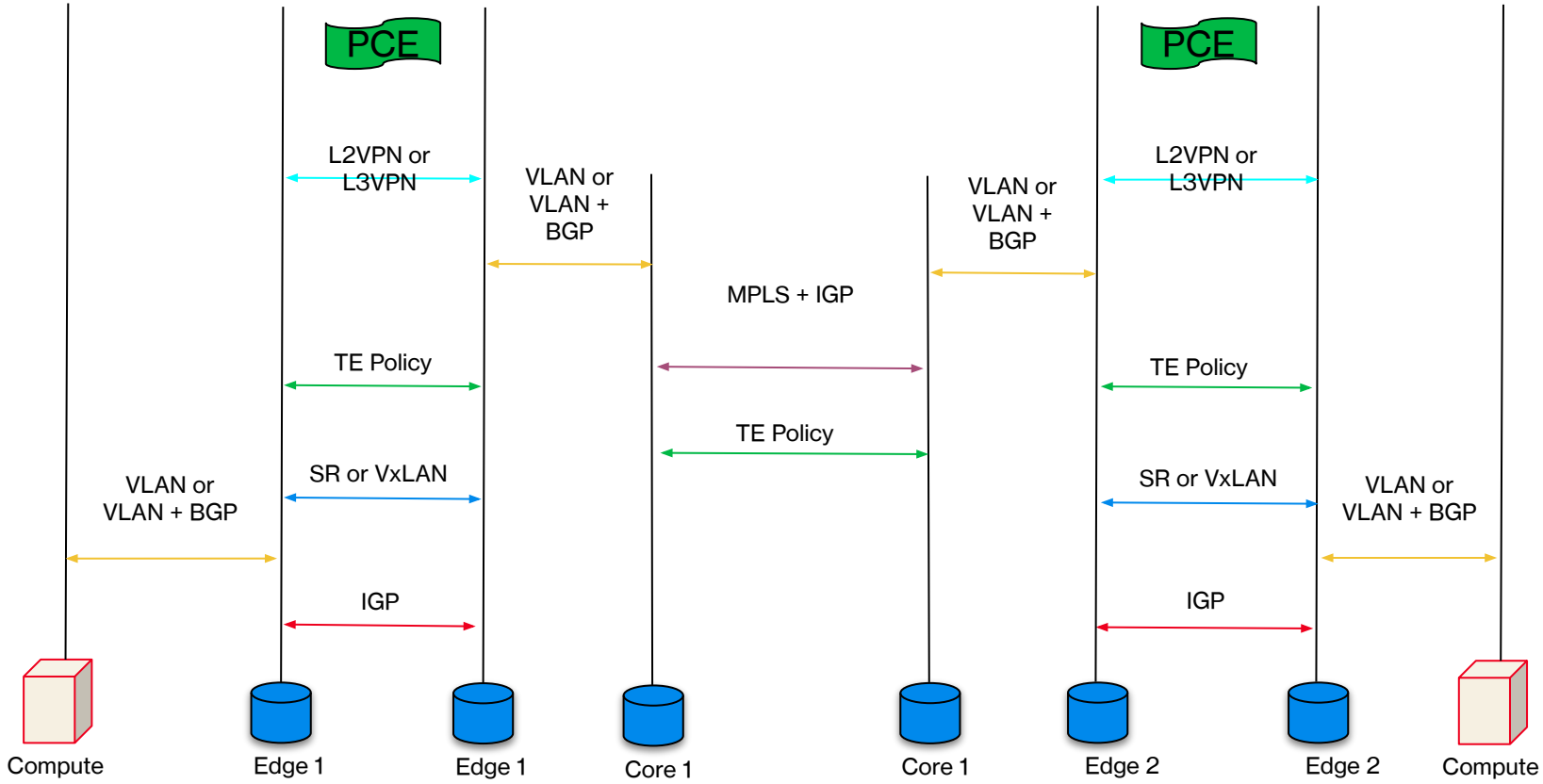
Edge/Compute domains are IP connected to appear flat, 1 encapsulation, traffic engineering Edge/Compute across domains

SRv6 on Host, Edge and Core P3

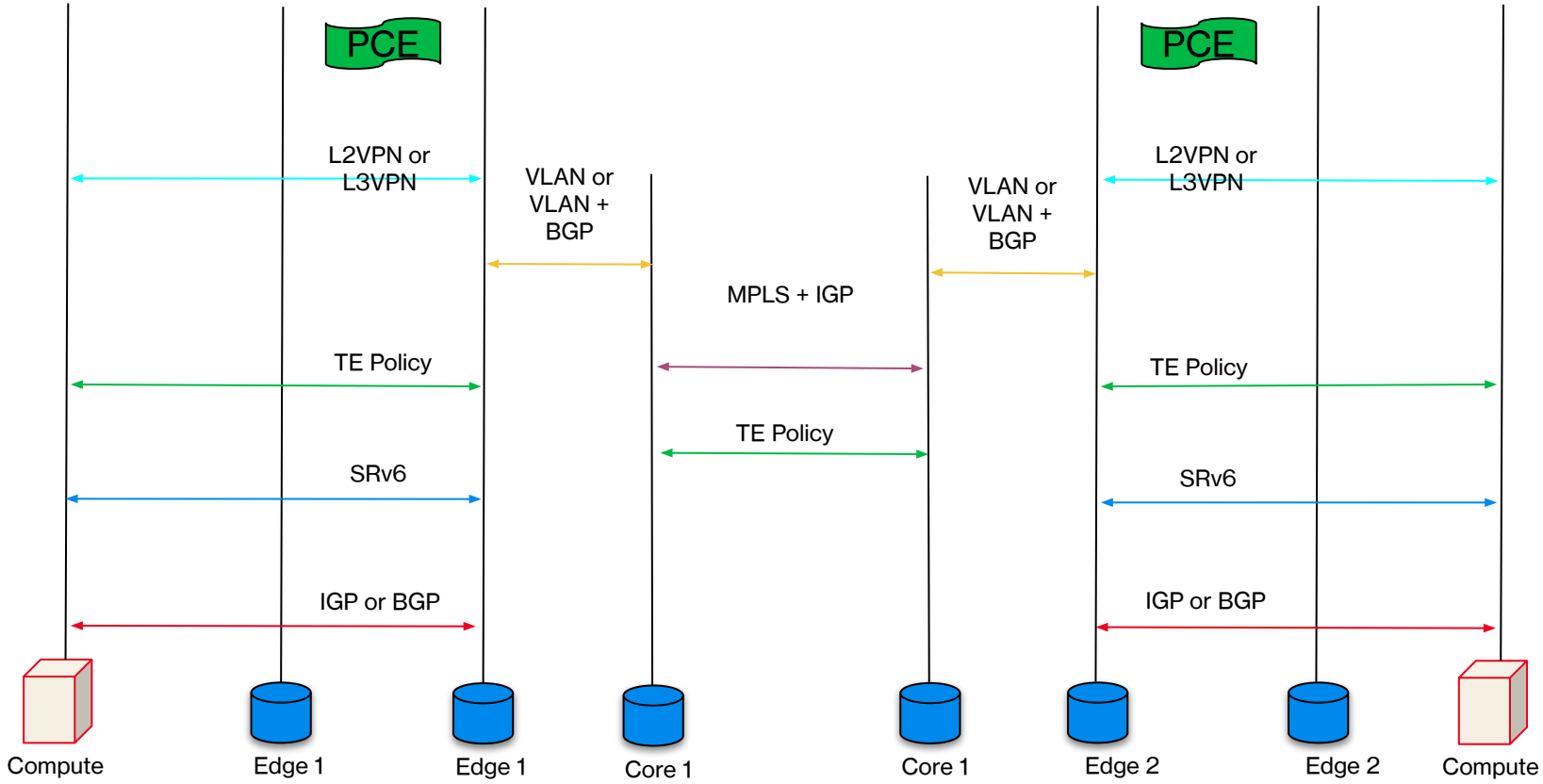


SRv6 in all domains, single encap, single configuration standard, single TE policy

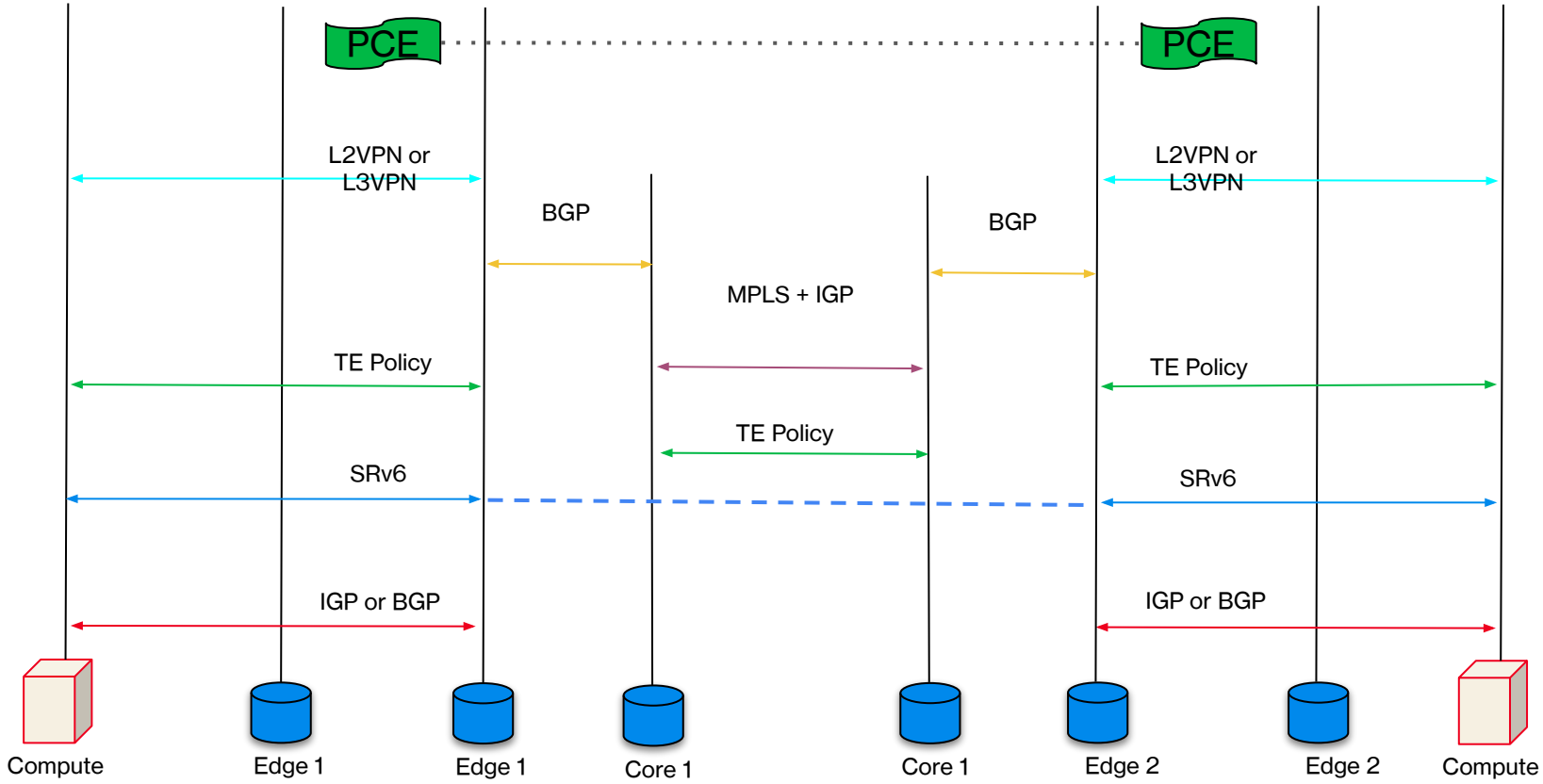
Typical Industry



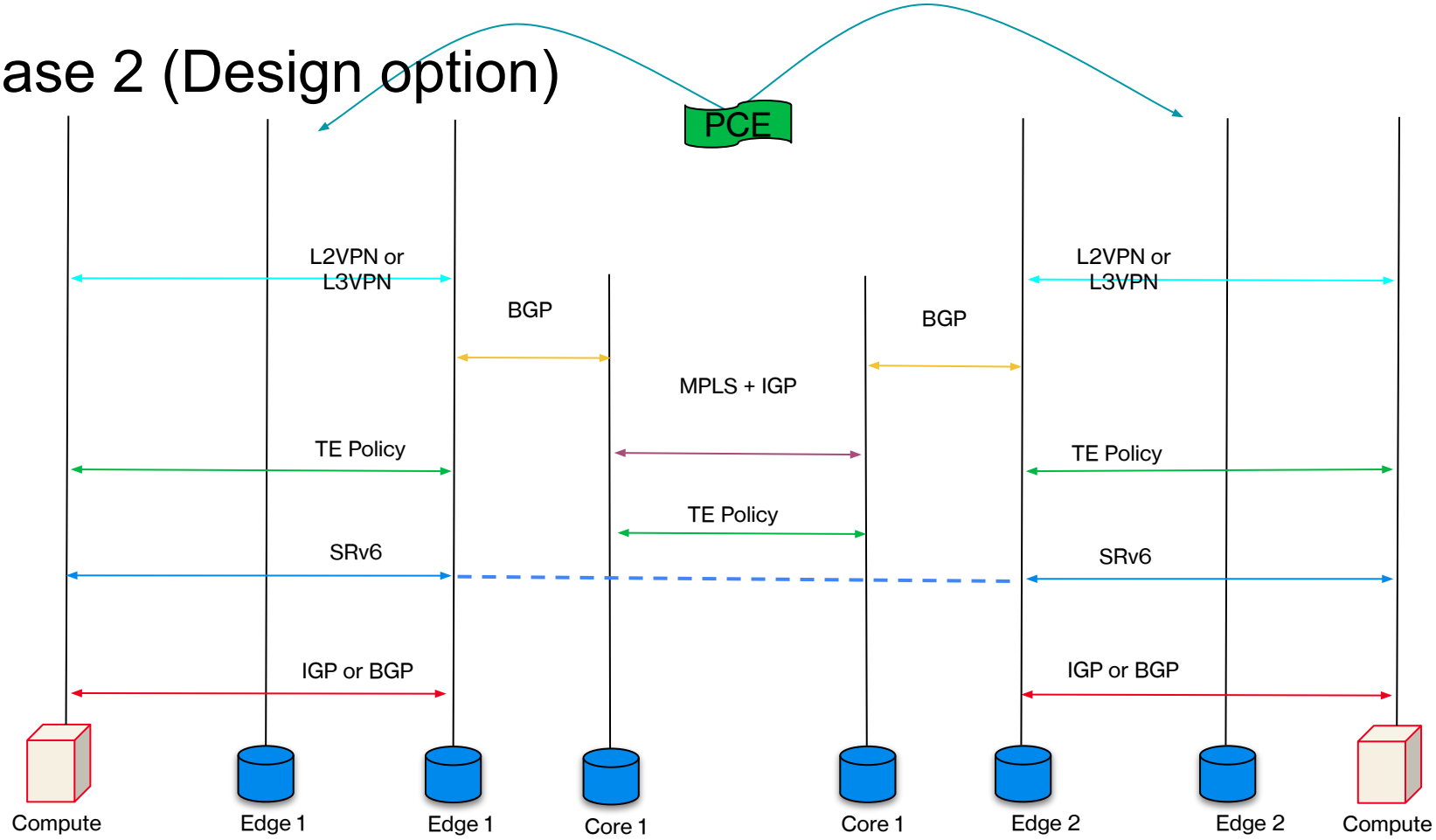
SRv6 on Host Phase 1



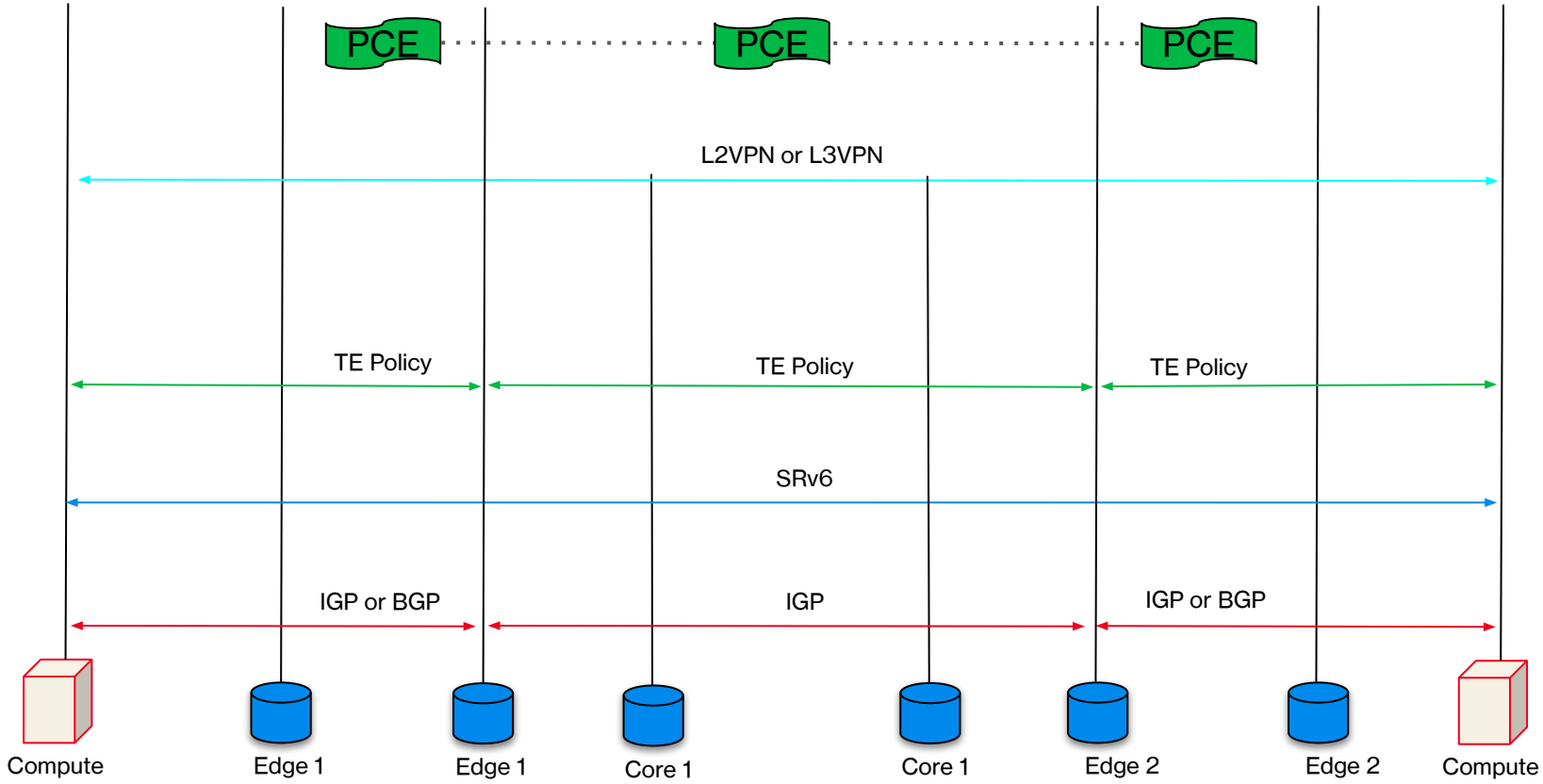
SRv6 on Host Phase 2 (end-to-end)



Phase 2 (Design option)



SRv6 on Host Phase 3



Phase 3 (Design option)