

Making plutonium-238 to power NASA missions

1. Neptunium-237 (Np-237) sent from INL to ORNL
2. ORNL fabricates Np-237 into target pellets
3. Pellets irradiated in ORNL's High Flux Isotope Reactor or INL's Advanced Test Reactor to convert Np-237 to plutonium-238 (Pu-238)
4. Targets processed at ORNL
5. Pu-238 shipped to LANL and fabricated into pellets clad in iridium
6. Pu-238 clads shipped to INL to fuel the radioisotope thermoelectric generator, which is then subjected to acceptance testing
7. RTG shipped to NASA's Kennedy Space Center



New Horizons



Curiosity Rover



Mars 2020

