1
00:00:00,000 --> 00:00:04,230
We designed the Kilopower reactors to
generate anywhere from one to ten

2
00:00:04,230 --> 00:00:07,589
kilowatts of electrical power. This is
enough to power several Earth-based

3
00:00:07,589 --> 00:00:11,490
homes. The nice thing about it is it's
lightweight it's compact so we can put

4
00:00:11,490 --> 00:00:14,549
it pretty much anywhere we want to. So
the reason we need so much power in

5
00:00:14,549 --> 00:00:19,140
space is for things that we don't
normally need on Earth, creating oxygen

6
00:00:19,140 --> 00:00:22,800
or creating propellant for astronauts to
leave the surface of where they're at. So

7
00:00:22,800 --> 00:00:25,980
there's several other factors
that come into play when we're putting

8
00:00:25,980 --> 00:00:30,330
humans on the surface of another planet
for survival that you just need extra

9
00:00:30,330 --> 00:00:34,309
power for. So the next steps for Kilopower
are going to be getting it into a flight.

10
00:00:34,309 --> 00:00:38,879
Whether we put it into space or whether
we put it on another surface of another

11
00:00:38,879 --> 00:00:42,960
planet we really need to take that next
step into in the flight development. We

12
00:00:42,960 --> 00:00:45,809
want to make sure that the reactor
worked the way we had modeled. There's

13
00:00:45,809 --> 00:00:50,010
physical models and there's analytical
models our analytical models told us

14
00:00:50,010 --> 00:00:53,550
that the reactor would would perform a
certain way when we we put different

15
00:00:53,550 --> 00:00:57,360
loads on, different power loads on it
and when we got to the test and we

16
00:00:57,360 --> 00:01:02,430
repeated what was in the experiment plan the
models matched the the real-life data

17
00:01:02,430 --> 00:01:05,880
and in some cases was actually better
than real-life data. So no matter what we