An Industry Government Partnership for Space Solar Power
COTS and CCDEV

- Bush initiated COTS
- Obama initiated CCDev
- “$6 Billion Over 5 Years”
Dragon
CST-100
The Design

• Critically important to have the right design
• SPS Alpha
• Sandwich Modules
SPS Alpha
Sandwich Module
Deployables

• Ingenious way to fold assets
• But is it possible to stow a square kilometer deployable in a single Delta IV?
Inflatables

- LISA-T
- Powerstar—3D printed
- 1 kilometer in diameter asset launched with a single Delta IV
- No assembly
LISA-T
Echo
Sphere

- Limited station keeping
- Limited attitude control
Finance

• $300 a watt for space applications
• $1 a watt for ground applications
• Tens of gigawatts for ground installed per year recently
• Costs for 1.2 terawatts for space applications?
Finance

• $0.05 kilowatt hour
• $44 million annual revenue for 100 megawatts delivered into the grid 24 hours a day
A Space Joint Stock Company

- Reinvest some of the proceeds into space
- With 1000 one kilometer in diameter assets potentially larger budget for space than NASA
Geo-Political Ramifications

• Visible in the skies all over the globe
• Surpass the prestige generated by Apollo
• Proof of the dynamism of liberal capitalist democracies