## **HIGHLY EFFICIENT NUCLEAR FUEL**



## Tiny Pellet Packs Plenty of Power



Wind and solar requirements to generate the same amount of electricity in a year as Ameren Missouri's Callaway Plant

Energy Source/Technology	# of Units Required	Land Mass Required
Nuclear Fuel Pellets	Four million per year	900 acres/1.4 square miles
Wind Turbines	2,400 turbines at 1.5 MW each	180,000 acres/280 square miles 1.5 MW each
Photovoltaic Solar Cells	One solar array nearly 9 miles wide by 9 miles long	50,000 acres/78 square miles 9 miles wide by 9 miles long

## Assumptions:

- Calculations for number of units and land mass required are based on producing 1,200 megawatts of generation
- Average Capacity Factors (availability) for each energy source: 1) Nuclear = 90%, 2) Wind = 30%, 3) Solar = 20%
- A one megawatt wind turbine requires approximately 50 acres of land to provide the proper footprint and wind sweep

· Between eight and ten acres are required for each installed megawatt of solar generating capacity