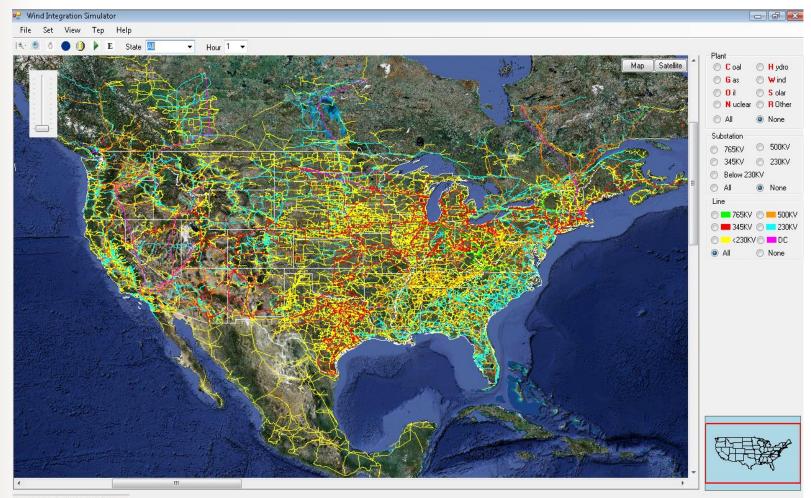


# Wind Energy and Power System in the United States

**Dr. Mohammad Shahidehpour** 

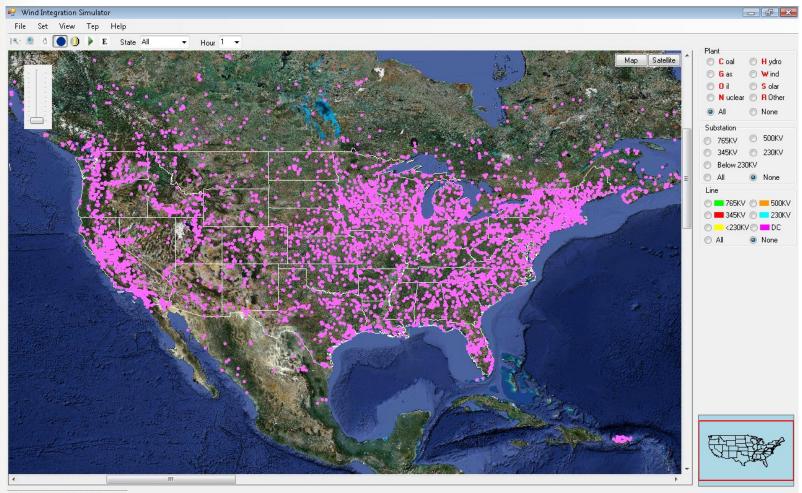
2010

#### **Transmission System in the United States**



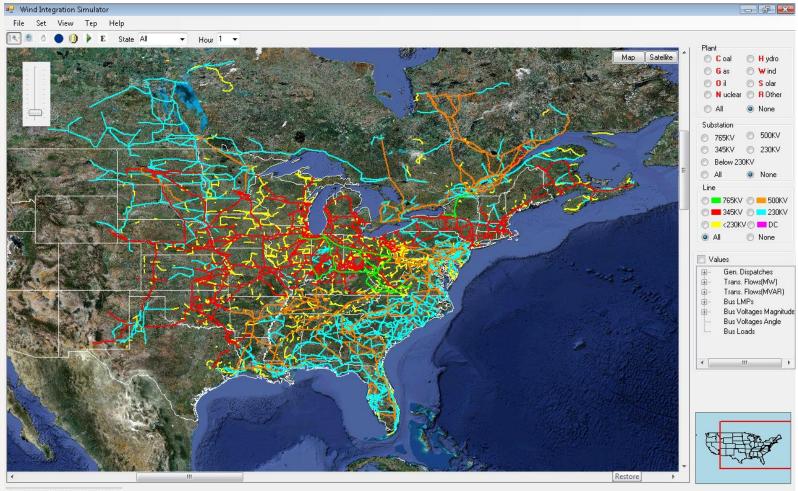
Level: 0 X:-98.1727 Y:51.3945 1

#### **Power Plants in the United States**



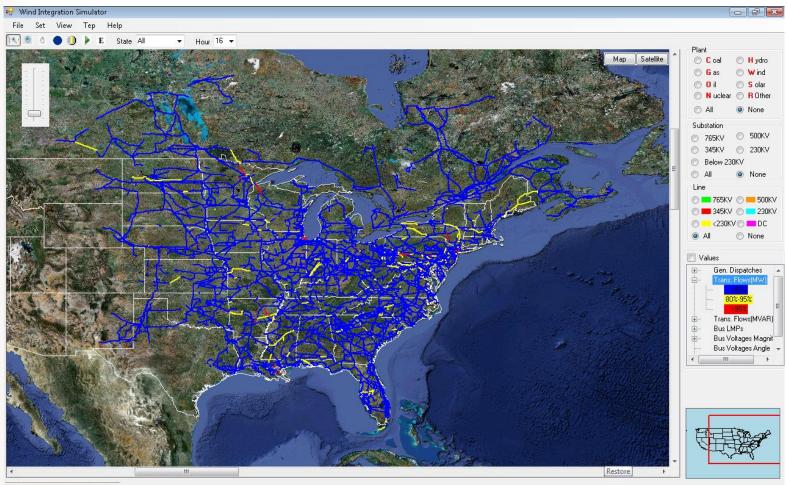
Level: 0 X:-128.7569 Y:59.6211 1

#### **Eastern Interconnection**



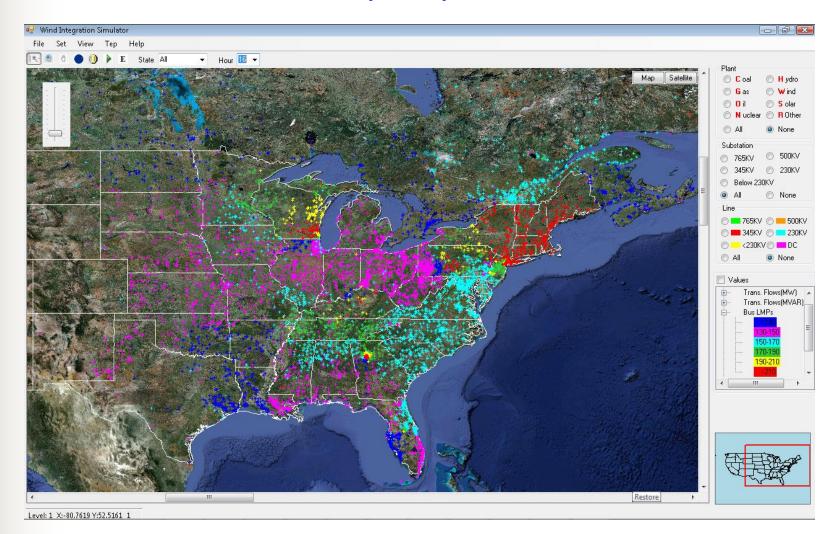
Level: 1 X:-96.4601 Y:24.8144 1

#### **Power Flow in the Peak Load Hour(2008)**



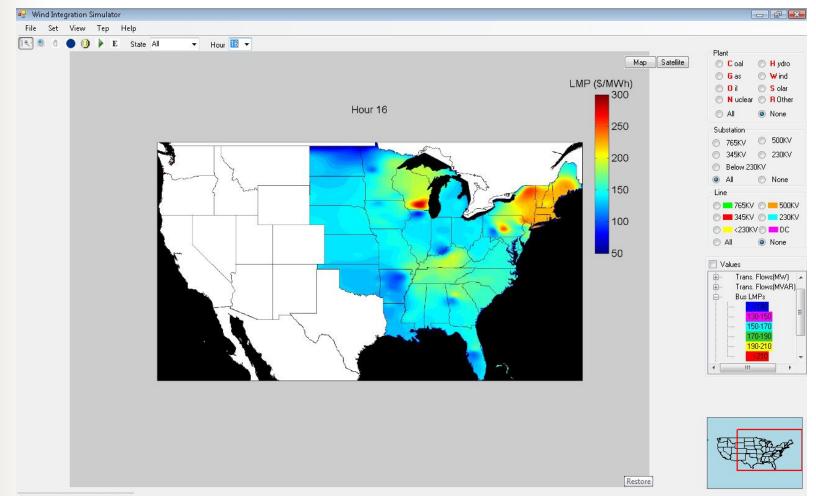
Level: 1 X:-95.0836 Y:47.9547 1

### LMP in Peak Load Hour(2008)



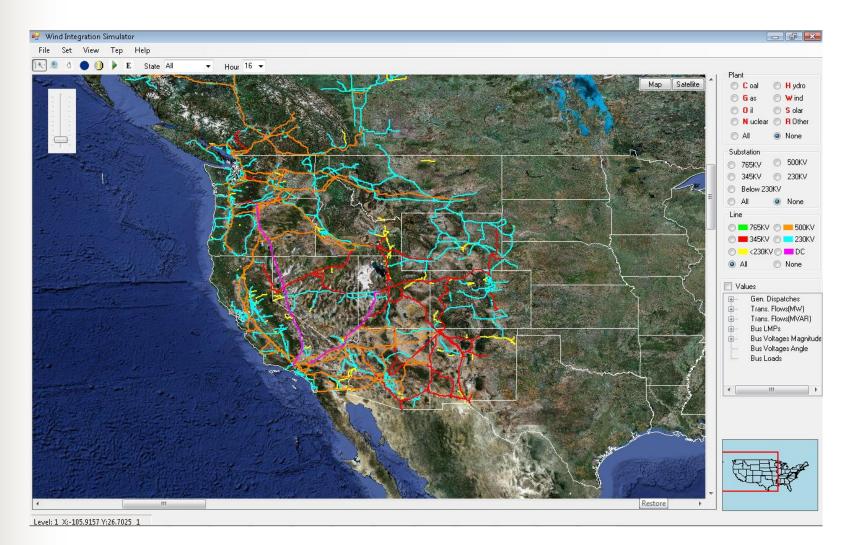
6

#### LMP Contour Map in Peak Load Hour(2008)



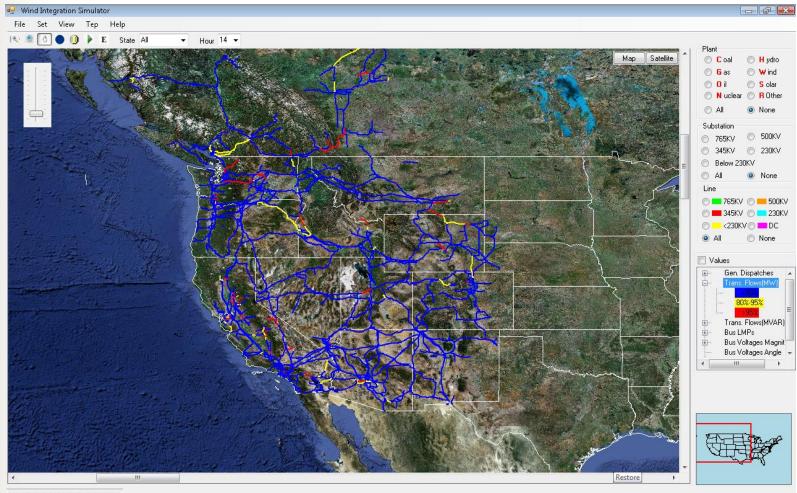
Level: 1 X:-74.2188 Y:24.6964 1

#### **Western Interconnection**



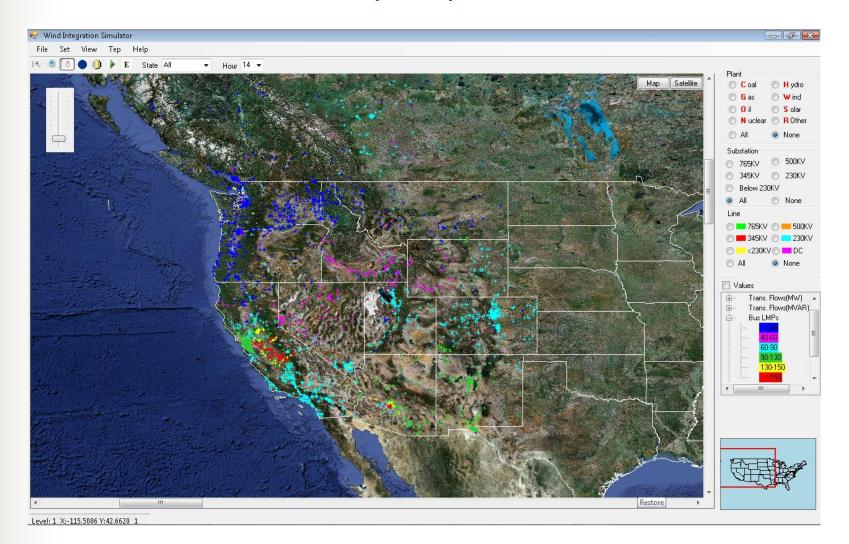
8

#### **Power Flow in Peak Load Hour (2009)**

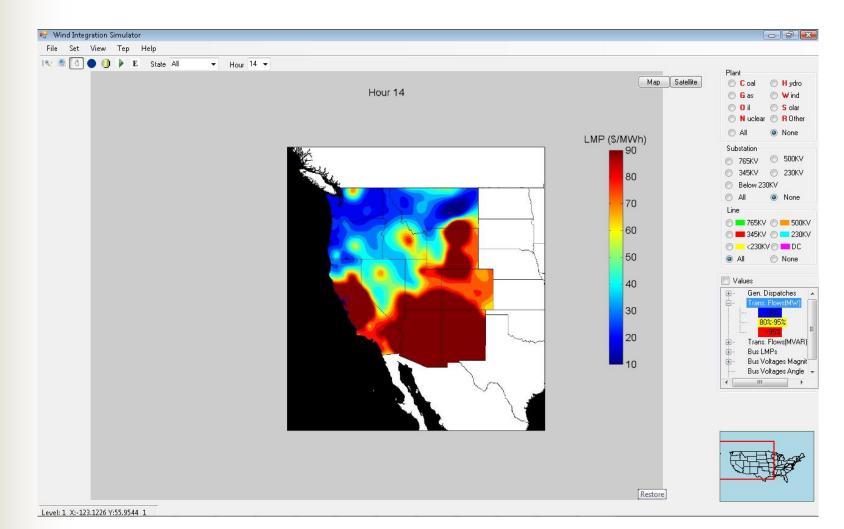


Level: 1 X:-91.3758 Y:45.8453 1

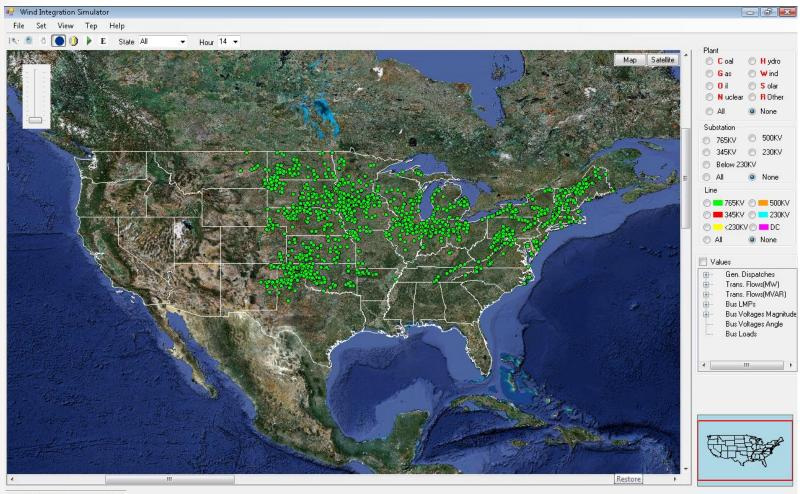
### LMP in Peak Load Hour (2009)



#### LMP Contour Map in Peak Load Hour(2009)

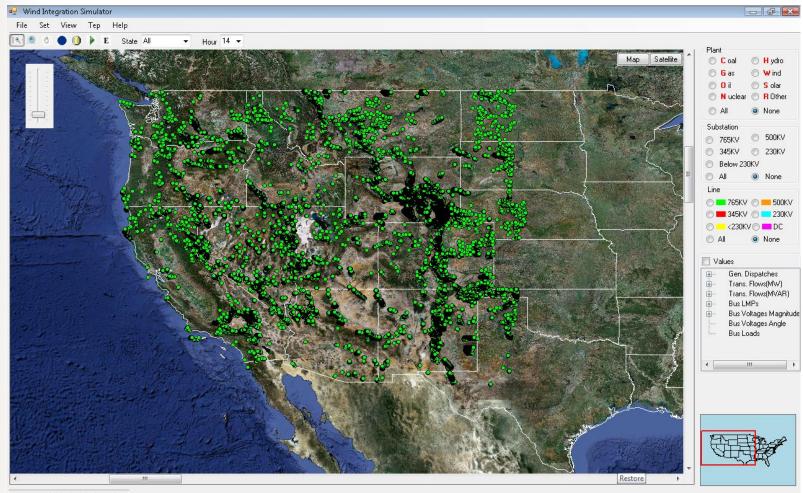


#### Land-based Wind Sites in the Eastern Interconnection(580GW)



Level: 0 X:-111.3750 Y:44.7602 1

#### Wind Sites in the Western Interconnection(900GW)



Level: 1 X:-106.1337 Y:42.0198 1

## Thanks

#### Dr. Mohammad Shahidehpour