

# **New England Generation Information System**

**Patricia D. Stanton**

**Deputy Commissioner**

**Massachusetts Division of Energy Resources**

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# What is NE-GIS?

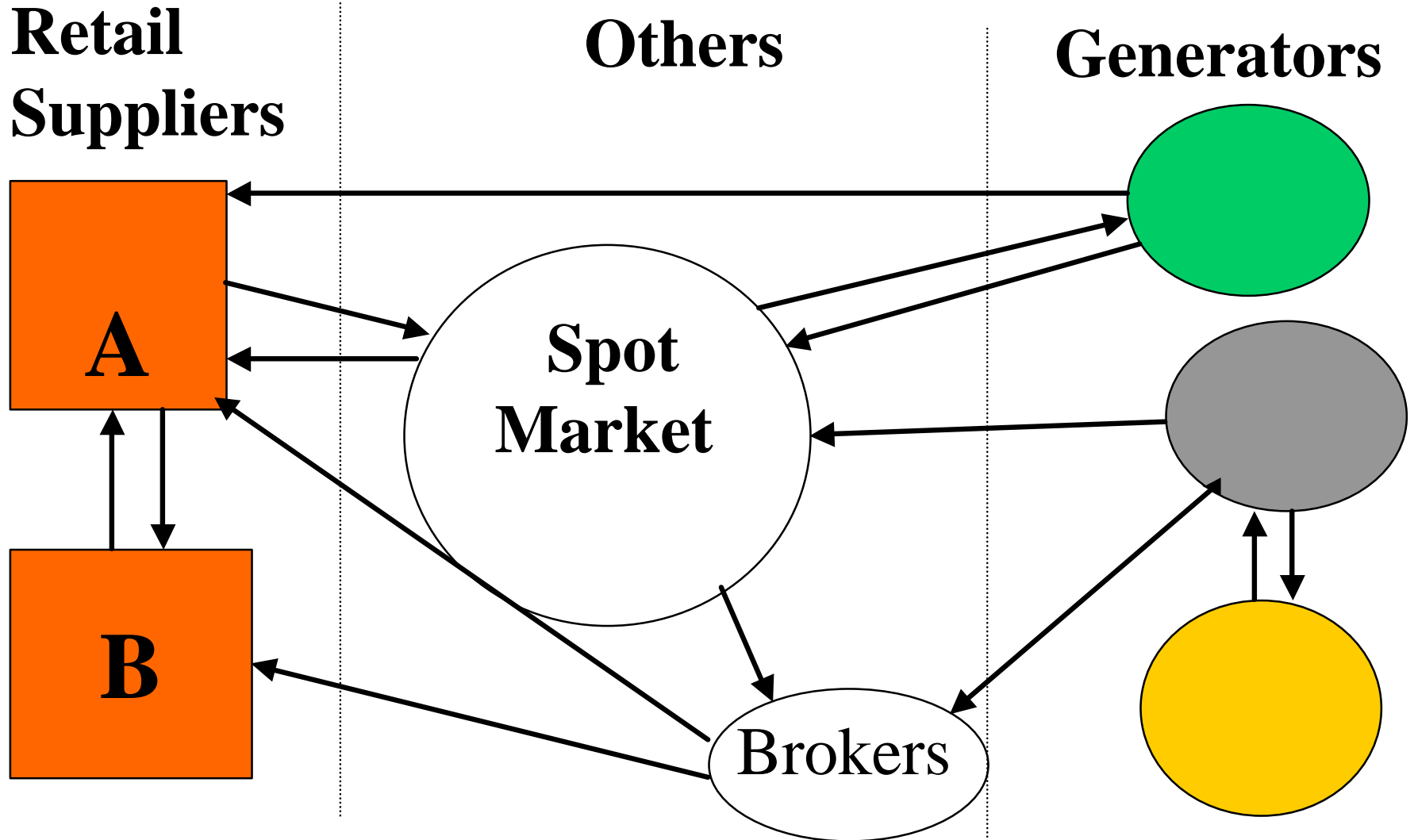
NE-GIS is an

Accounting System

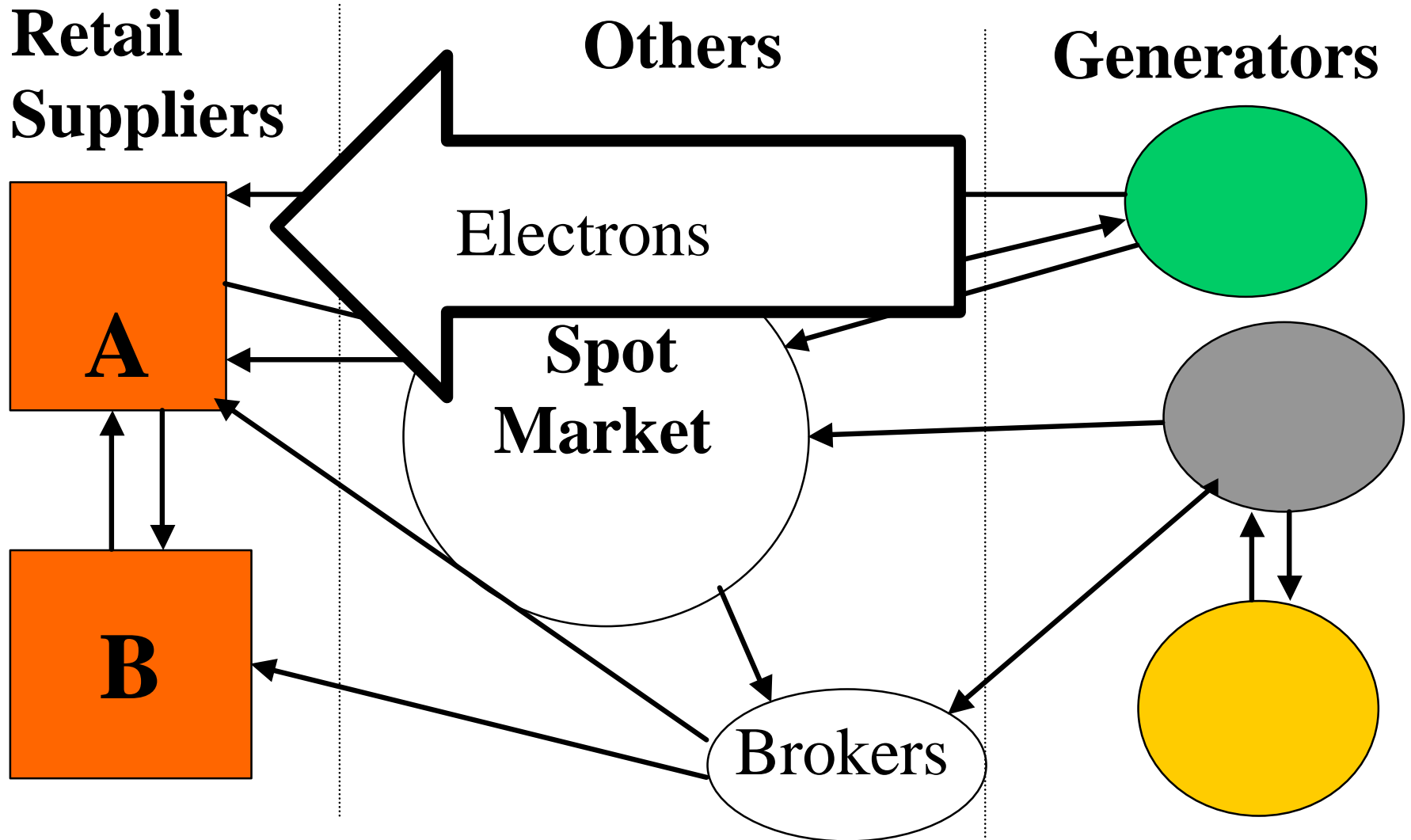
for

Generation Attribute

# Simplified Electricity Market



# Where your electrons come from?

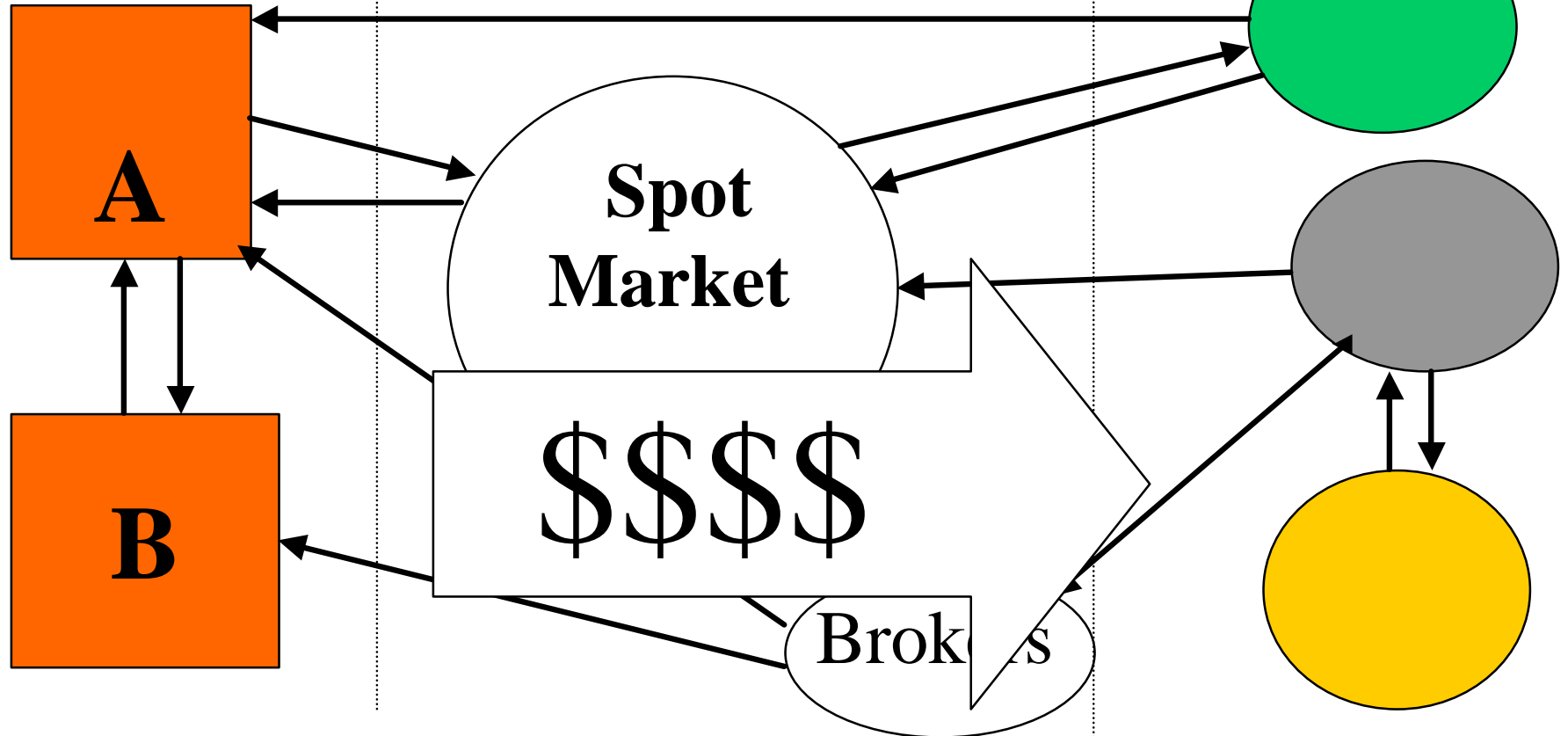


# Where your Money goes ?

**Retail  
Suppliers**

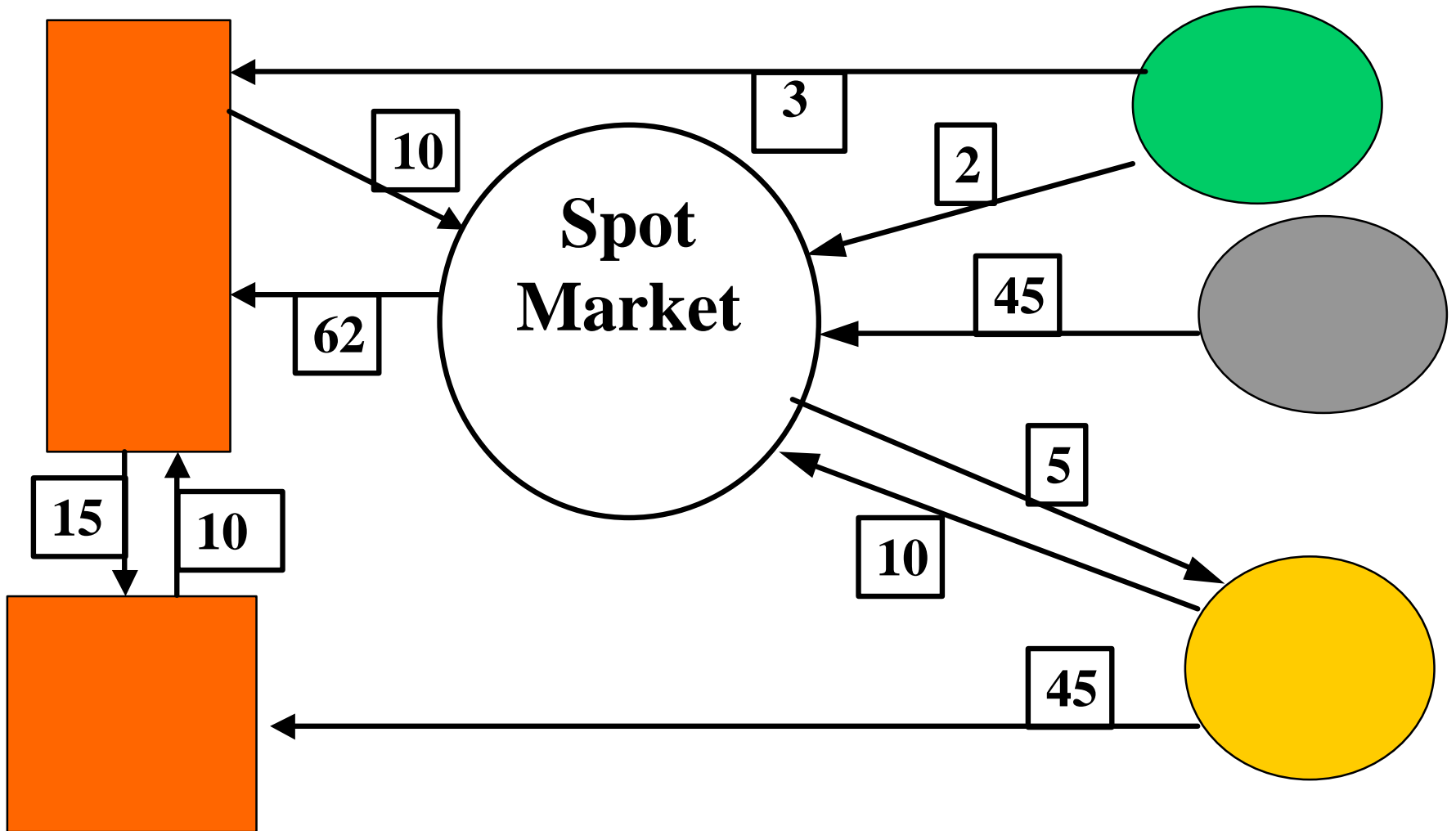
**Others**

**Generators**



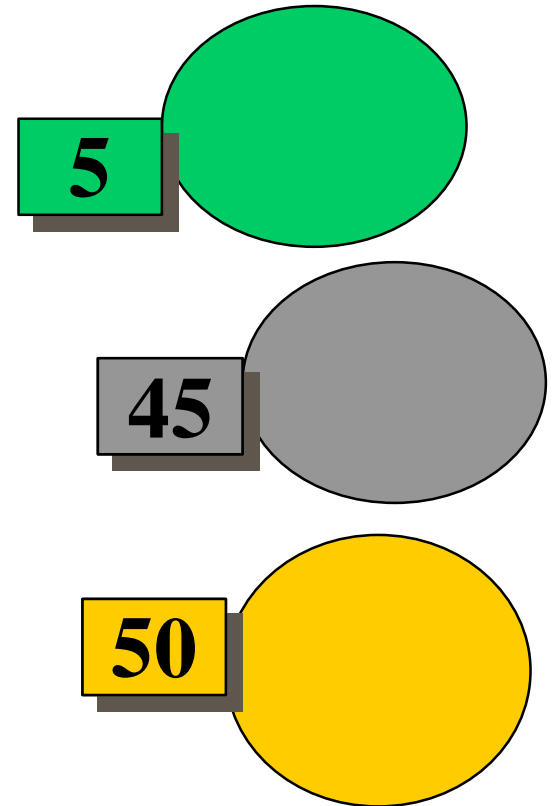
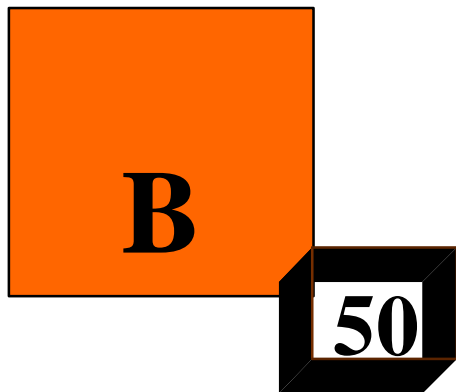
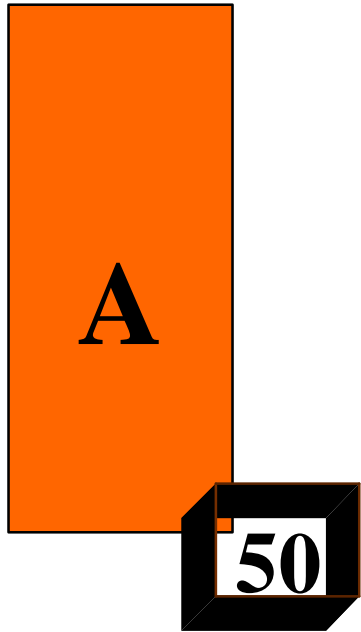
# Example

total transactions = 177



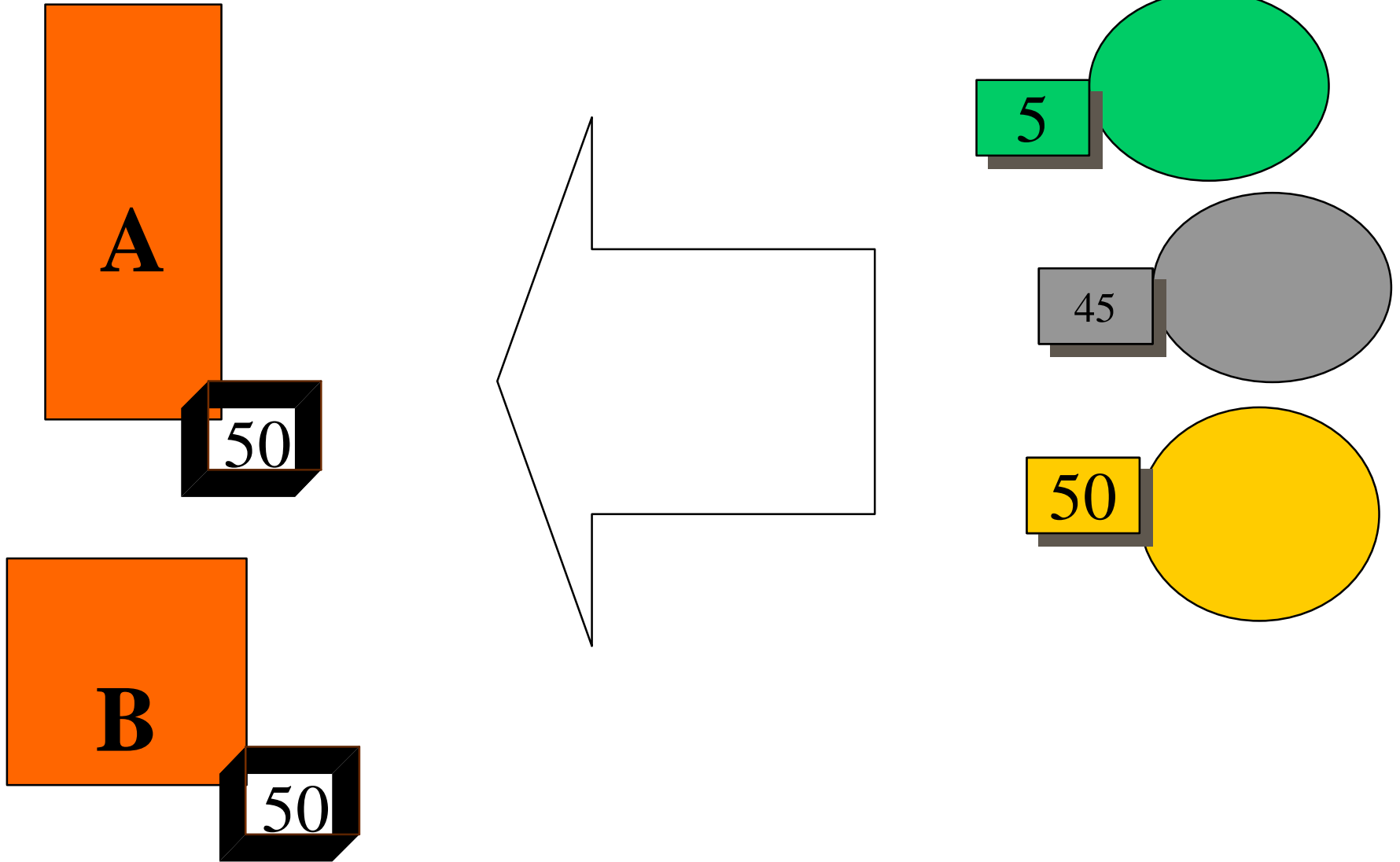
# Certificates

net = 100



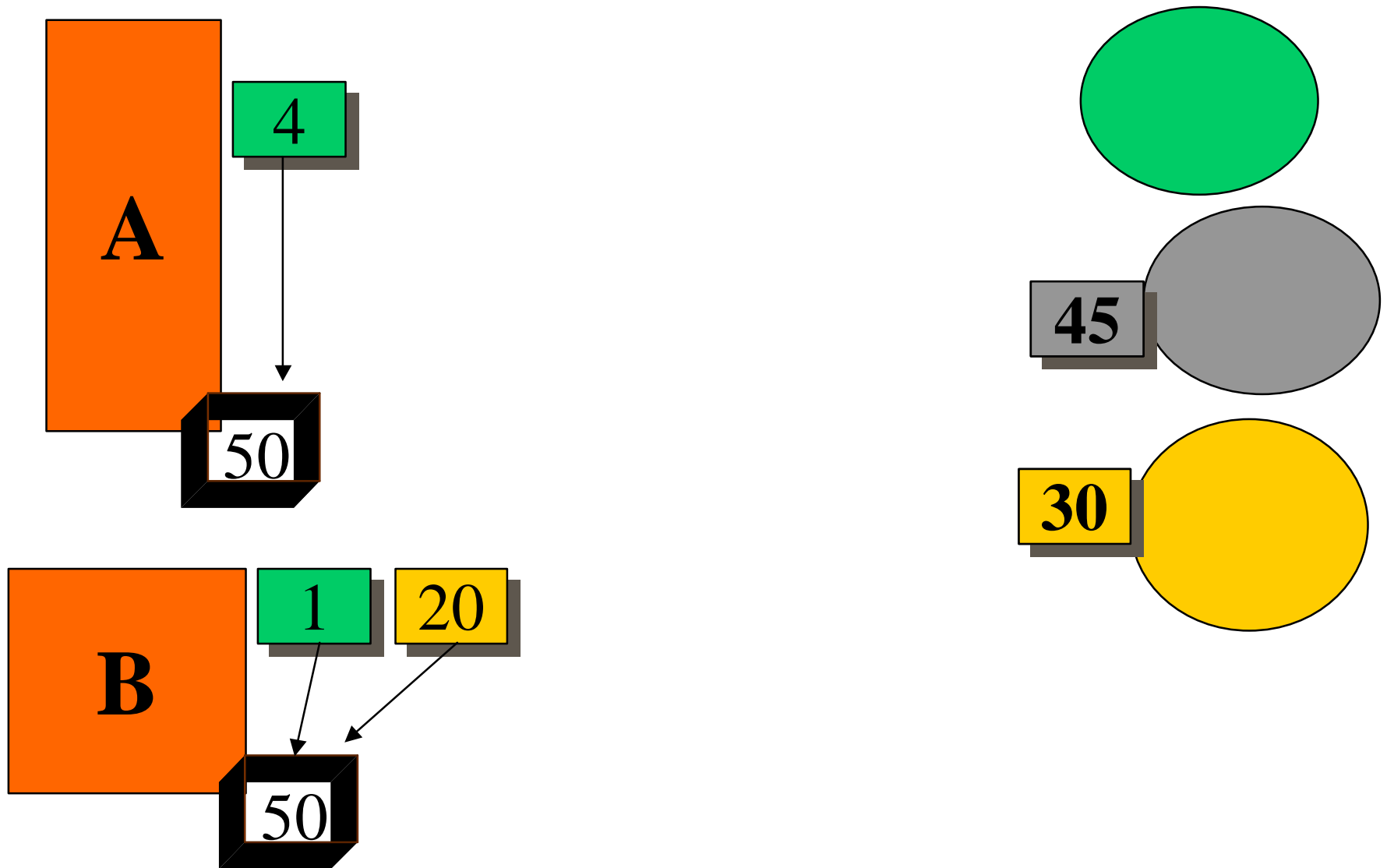
# Certificate Trading Period

## 60 days

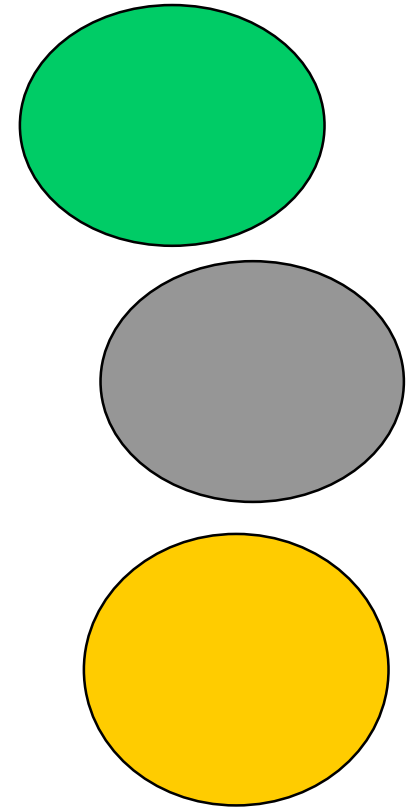
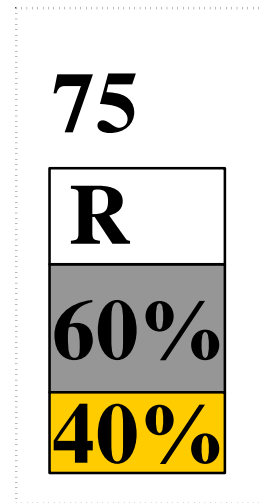
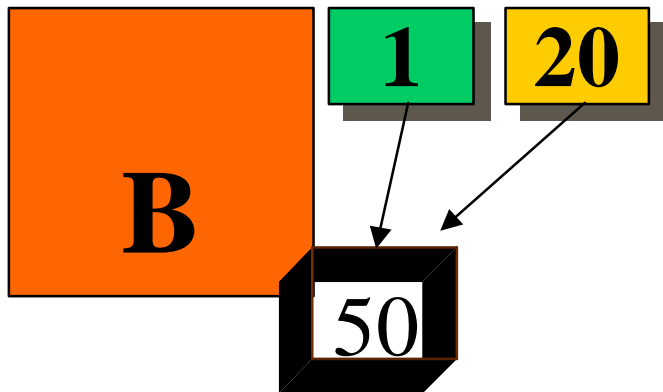
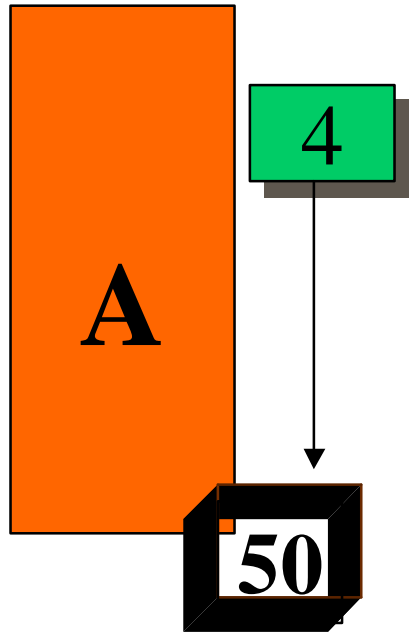




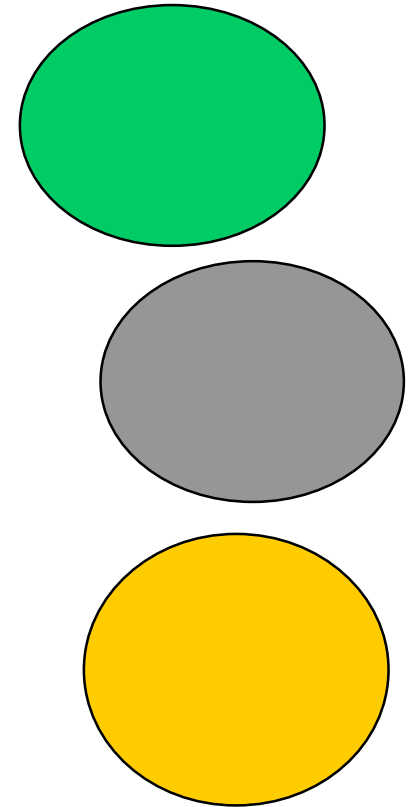
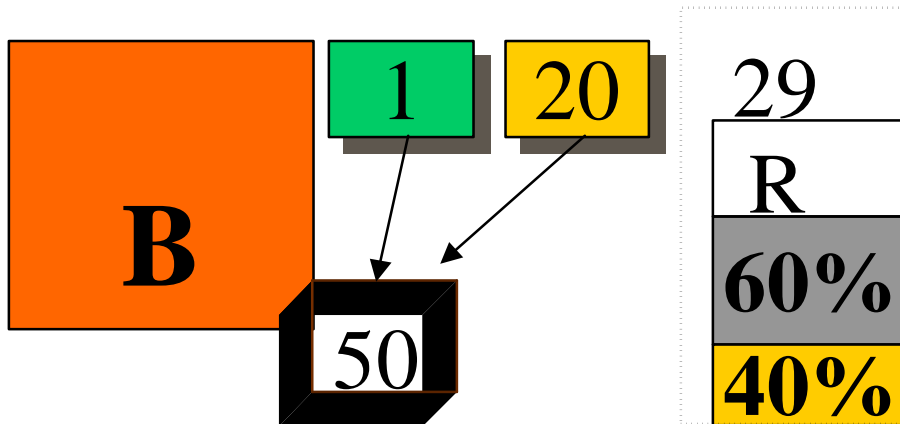
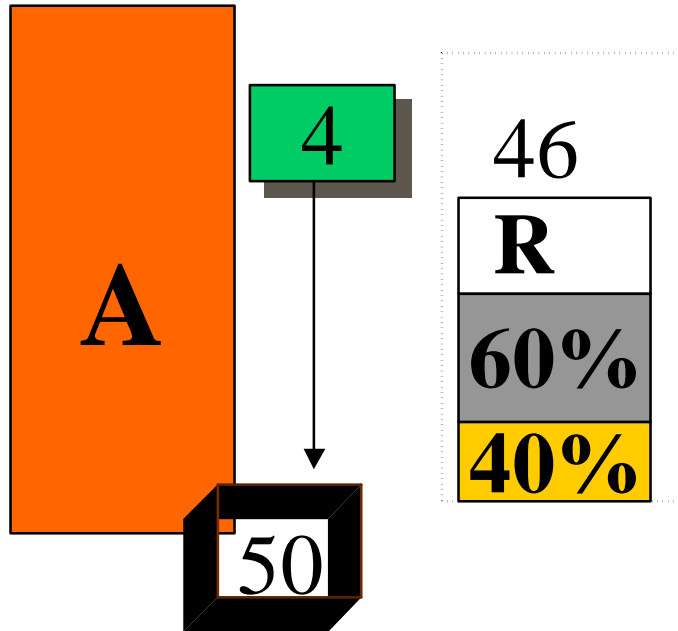
# Trades for Value



# Residual Certificates

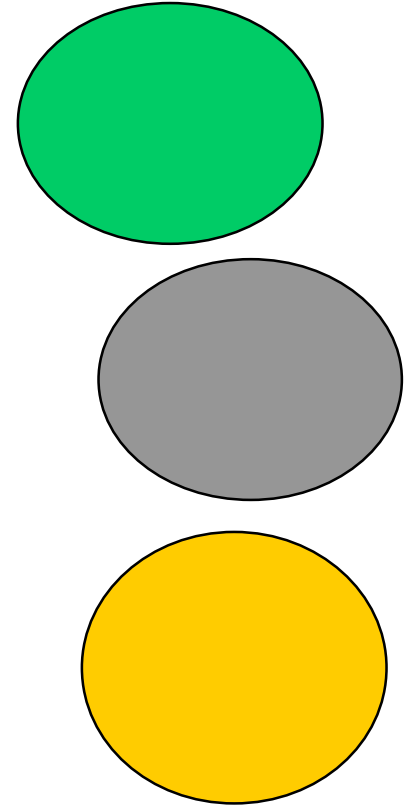
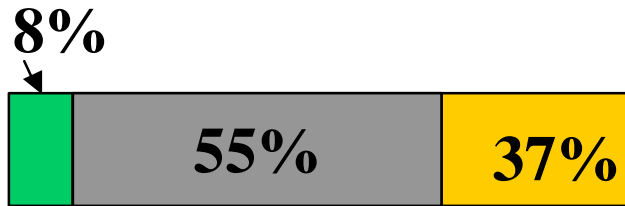


# Residual Certificates

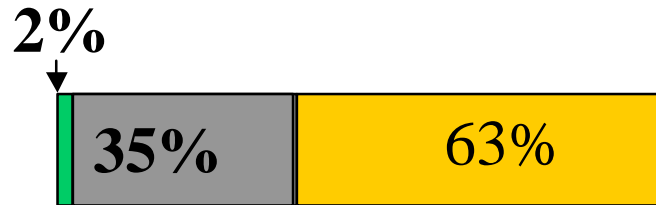


# Attribute profile

Supplier  
**A**



Supplier  
**B**



# Trading Cycle

	← 2002 →			← 2003 →		
	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Nov	Jan -Feb	Apr - Jun
Generate						
Verify						
Trade						

# Design Constraints

- **Minimize Gaming**
- **Preserve rights of states**
- **Support Customer Choice**
- **Revenue Quality Data**
- **Minimal impact on energy markets**
- **Affordable**

# Design Issues

- **Physical vs.. Financial**
- **Mandatory vs. Voluntary**
- **Full vs. partial**
- **Product vs. portfolio**
- **Projections vs. Actual**

# Design Issues

- **Reference time**
- **Data acquisition costs**
- **Imports and Exports**
- **Dual fuel**
- **Reserve (Attribute only)**



# Certificates Design

- Units ⇔ **MWh**
- Time period ⇔ **Monthly**
- Generator ⇔ **“Assignment”**
- Retail Sellers ⇔ **“Obligations”**

# **Admin. Functions**

- **Register Account Holders**
- **Record Generators' Profiles**
- **Calculate Generators Certificate Assignment**
- **Calculate Retail Sellers Certificate Obligations**
- **Transfer Certificates**
- **Operate Bulletin Board**
- **Reconciliation Trading Period**

# Experience To Date

- **Contract**
- **Design**
- **Registration**
- **First Trading Period**
  - **Nuke CO2 offered for sale**
  - **Trades @ \$25 to \$35 per MWh**
  - **Futures Contracts**

# Who Made Up The Rules?

## NEPOOL

- runs the electricity markets and manages the grid for six states in New England
- volunteered to run NE-GIS
- Design details in Operating Rules available at: [www.nepoolgis.com](http://www.nepoolgis.com)

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