

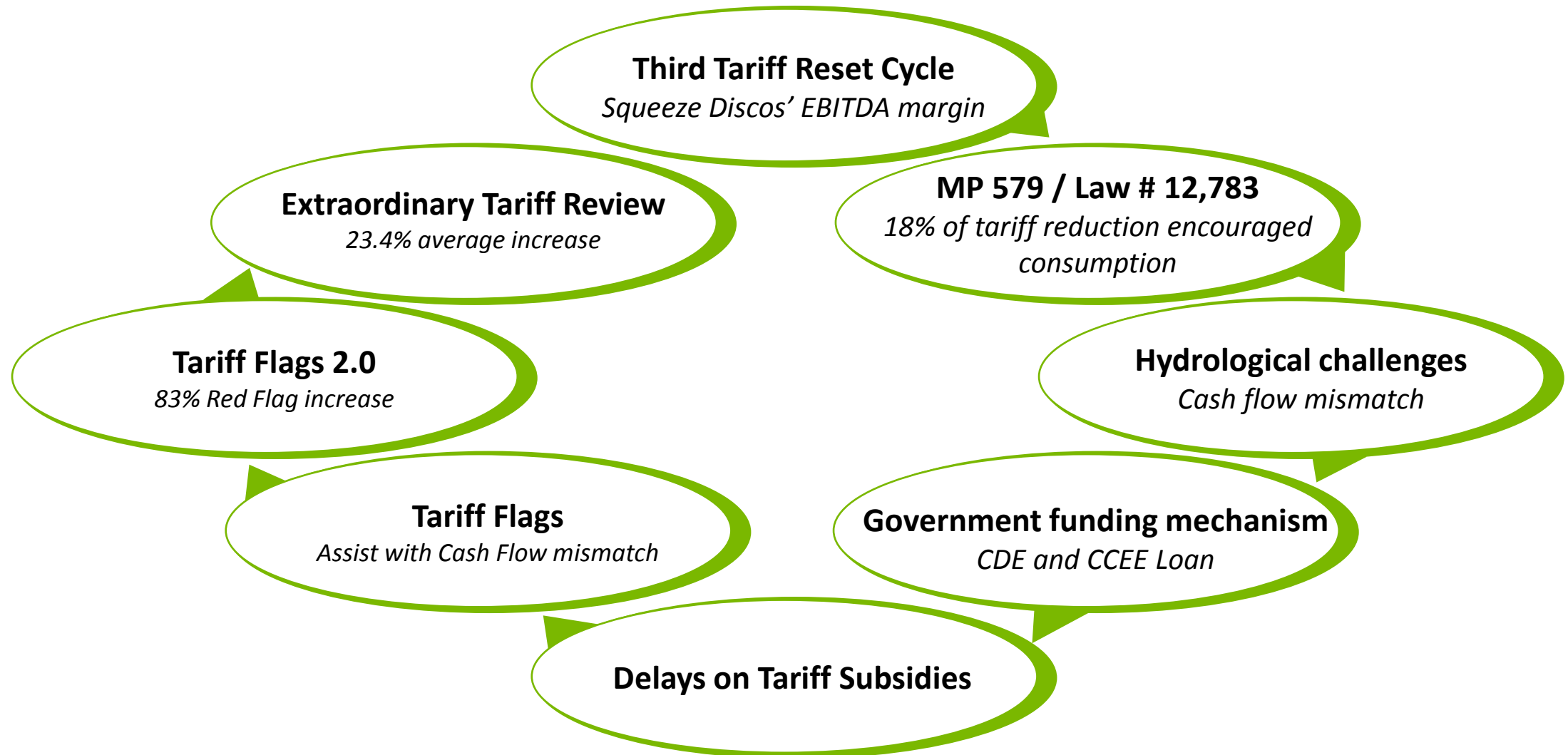


# VI Conferência do Setor Elétrico Brasil – Santander

Britaldo Soares - March 2015



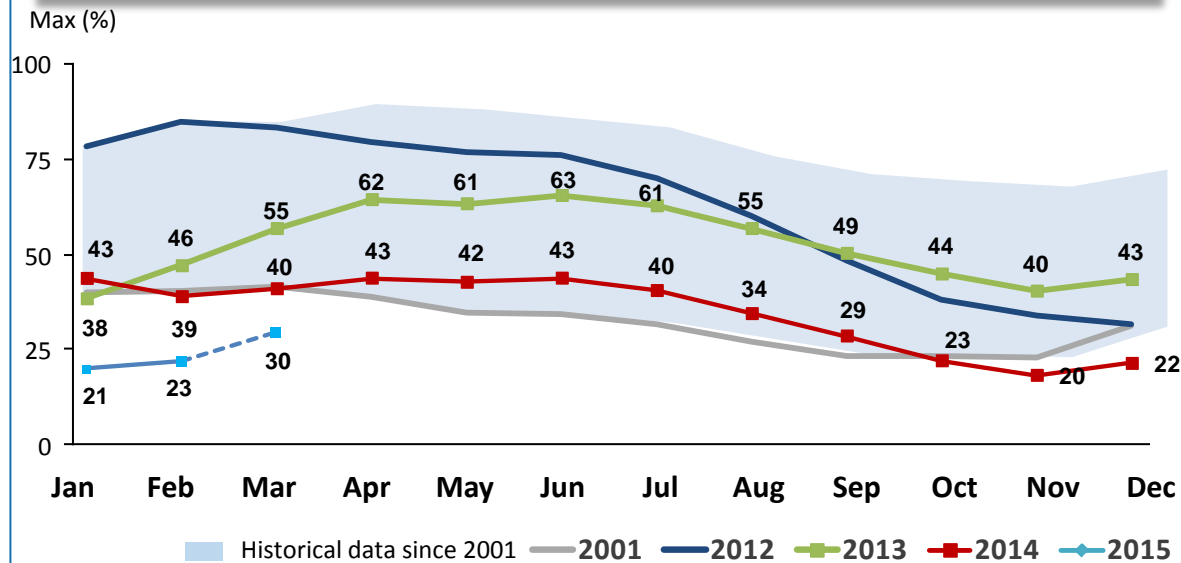
# Brazilian electricity sector recent evolution



# Challenges ahead

## Hydrological scenario

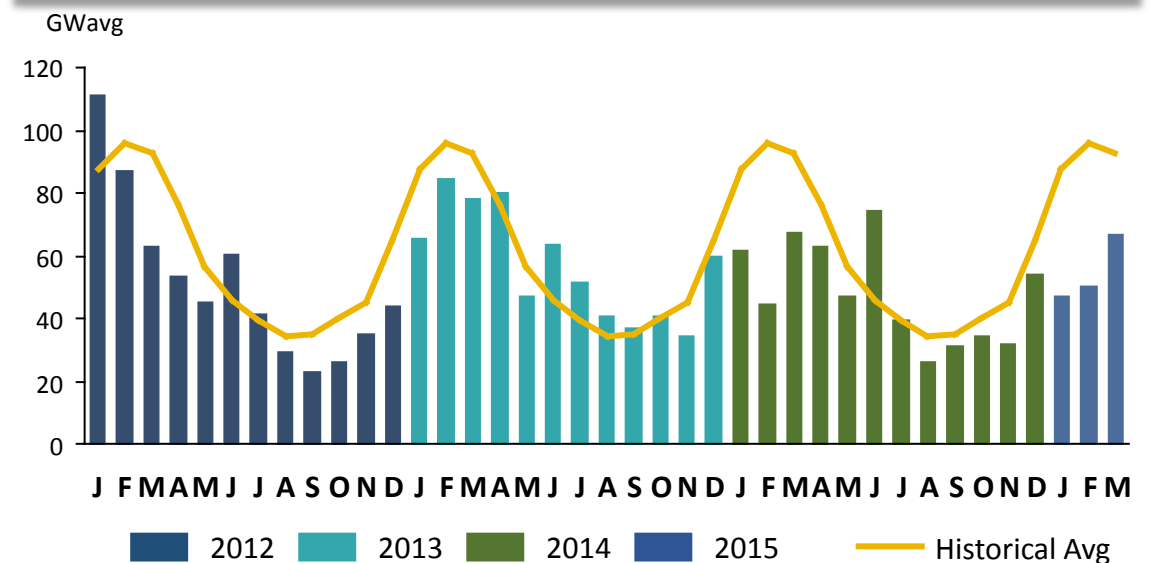
### Historical Level of Brazilian Reservoirs (%)



#### Annual Inflow:



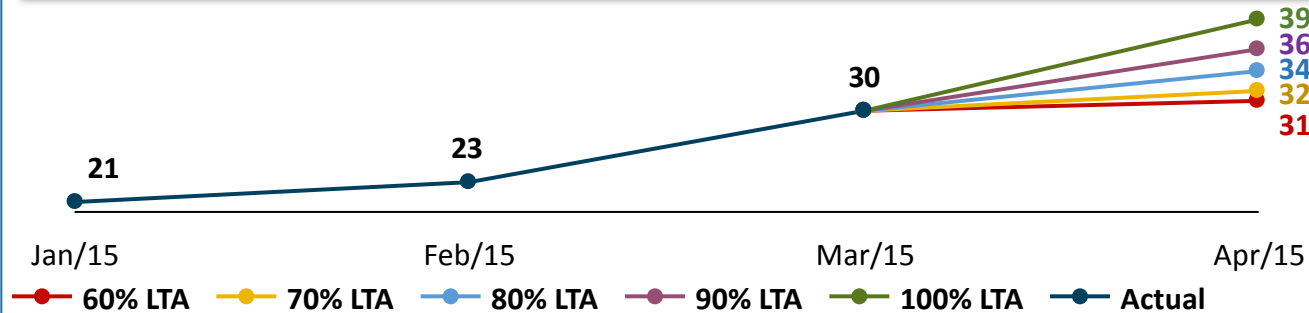
### Historical SIN Inflow (GWavg)



- Inflows lower than historical levels over the last 3 years

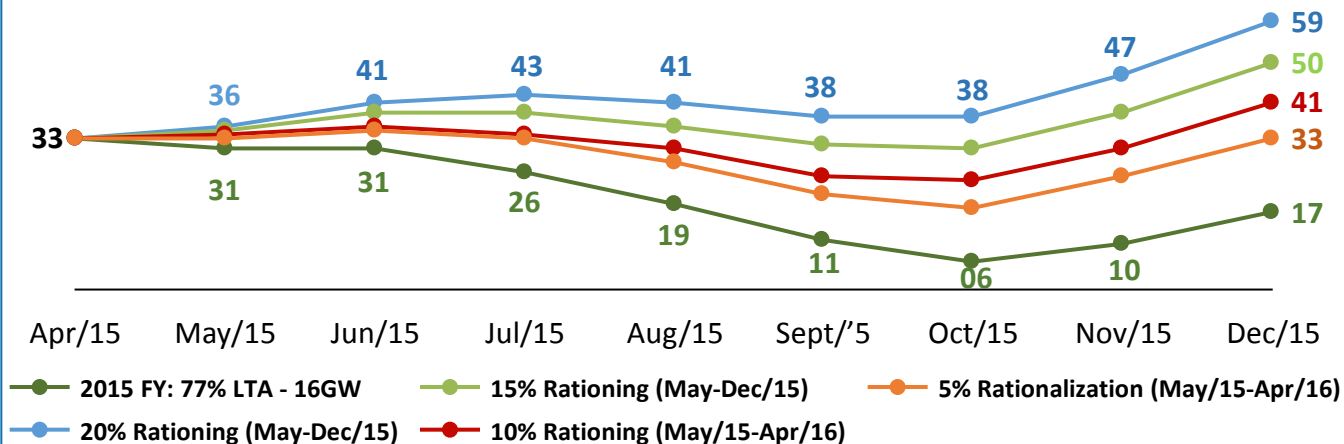
# Rationing risk

SIN reservoir level (%) vs. Inflow



- Reservoir level is currently at 23.6%<sup>1</sup> of its full capacity
- Weak hydrology in January and February has substantially increased rationing risk
- Spot prices to stay at cap price (R\$ 388.48/MWh) in 2015
- Projected thermal dispatch of 16-17GWavg in 2015
- Estimated 2015<sup>2</sup> GSF of 0.83 to 0.85

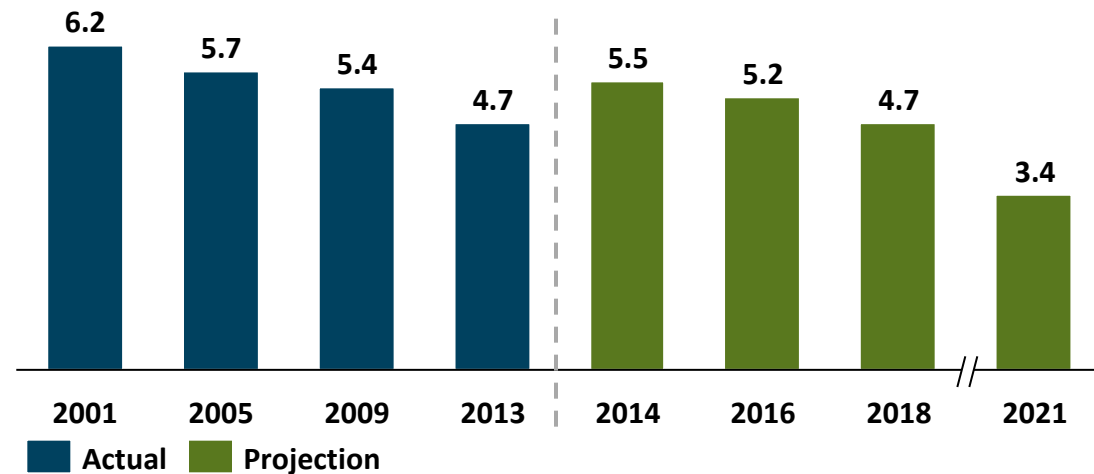
SIN reservoir level (%) vs. Inflow



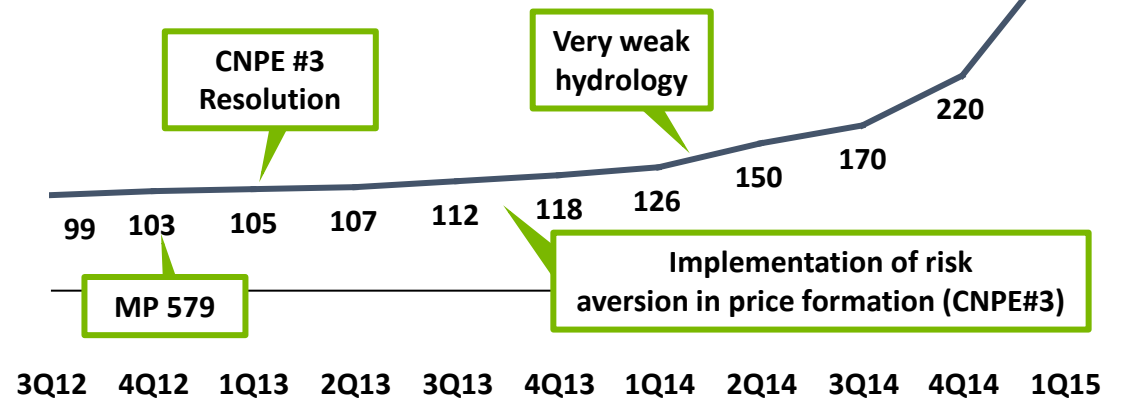


# Tight hydrology, lower system storage capacity and regulatory framework increase energy prices

Storage capacity (months)



Price quotations for 2016 (R\$/MWh)



**Short term contract prices** highly influenced by current low hydrology and regulatory interferences

**Long term contract prices** with an **increasing trend**: 150-180 R\$/MWh from 2018 onwards

- **Increase** in the **regulated tariffs** – captive market reference
- **Increase** in the **Expansion Marginal Cost (CME)**
  - **More** realistic and **attractive returns** for **new projects**
  - **Reduced** available **capital for financing** and **higher interest rates** – even from BNDES

# Latest Govt. Measures to shield Parcel A

## Tariff Flag

## Tariff Flag 2.0

## Extraordinary Tariff Review

Time	<ul style="list-style-type: none"> <li>• In place since January, 1<sup>st</sup> 2015</li> </ul>	<ul style="list-style-type: none"> <li>• In place since March, 2<sup>nd</sup> 2015</li> </ul>	<ul style="list-style-type: none"> <li>• In place since March, 2<sup>nd</sup> 2015</li> </ul>
Descriptions	<ul style="list-style-type: none"> <li>• Reduce cash-flow mismatch</li> <li>• To partially cover higher energy costs (thermal costs)</li> </ul>	<ul style="list-style-type: none"> <li>• Broaden application:                             <ul style="list-style-type: none"> <li>– hydrological risk</li> <li>– involuntary exposure</li> <li>– sector charges (ESS)</li> <li>– thermal costs</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Cover additional costs:                             <ul style="list-style-type: none"> <li>– CDE</li> <li>– Itaipu (tariff increase and dollar variation)</li> <li>– A-1 and Adjustment Auctions</li> </ul> </li> </ul>
Risks	<ul style="list-style-type: none"> <li>• Costs not fully covered</li> <li>• Higher bad debt and NTL<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Costs fully covered</li> <li>• Higher bad debt and NTL</li> </ul>	<ul style="list-style-type: none"> <li>• Higher bad debt and NTL</li> </ul>
Tariff increase	<ul style="list-style-type: none"> <li>• ~11% at AES Eletropaulo residencial tariff<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>• ~8% at AES Eletropaulo residencial tariff<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>• 32% AES Eletropaulo average increase:</li> <li>• 26% residencial tariff<sup>2</sup></li> <li>• 40% high voltage</li> </ul>

# 4<sup>th</sup> TRC – improvements and opportunities

Improvements	WACC	<ul style="list-style-type: none"><li>• WACC of 8.09% already defined (vs. 7.5% of the 3<sup>rd</sup> cycle and 7.16% of first 4<sup>th</sup> TRC proposal)</li></ul>
	Special obligation assets	<ul style="list-style-type: none"><li>• Remuneration fee over Special Obligations</li></ul>
	X factor	<ul style="list-style-type: none"><li>• Sector's avg productivity of 1.64% (vs. 1.03% of the 3<sup>rd</sup> cycle and 1.91% of first 4<sup>th</sup> TRC proposal)</li></ul>
	O&M	<ul style="list-style-type: none"><li>• Methodology better values efficient companies by adding:<ul style="list-style-type: none"><li>- Quality and non technical losses standards</li><li>- Aspects of metropolitan concessions: underground network, salaries adherence and labor liabilities</li></ul></li></ul>
Opportunities	Assets 100% depreciated	<ul style="list-style-type: none"><li>• Recognition of the opportunity cost of equity capital over fully depreciated assets</li></ul>
	O&M	<ul style="list-style-type: none"><li>• Inclusion of RAB disallowance effects in the Regulatory OPEX</li><li>• Regulatory treatment for the Pension Plan liability</li></ul>
	Bad debt	<ul style="list-style-type: none"><li>• Increase bad debt level considering current higher tariffs</li></ul>