

# Price Regulation of the Residential (Retail) Energy Market

***Comparing the practices of the United States of America with the European Commission's "Clean Energy Package" proposal***

**Dr. Attila Nyikos**

Vice President for International Affairs

Hungarian Energy and Public Utility Regulatory Authority

**VS.**



**"Electricity Market Integration 2.0" in Central and South East Europe  
2nd Central and South East Europe Energy Policy Forum**

Budapest, May 30, 2017

# The „Clean Energy Package” proposal – recommendation for the phase-out of administrative price regulation

- The Commission published its complex draft regulation package entitled “Clean Energy for all Europeans” (hereinafter: Package) on 30 November 2016
- The recast of Electricity Directive 72/2009 contains the introduction of market-based pricing, especially **on the retail markets, where the possibility of applying administrative price regulation is restricted** to be applied exclusively to vulnerable or energy poor consumers



# Clash of Schools

By presenting the industrial regulations and practices of the **United States** and comparing them to the recommendations of the Package, our aim is to examine and **justify that it is possible to maintain administrative price regulation on the retail market, and to have retail administrative price regulation and free retail markets at the same time even within (member) states of a federal state/country.**

We would like to highlight that **the fact that it is possible to have administrative price regulation and free retail markets parallel within a (federate) state – in US member state (or in smaller regions) -, shows that the proposal of the Package to withdraw administrative retail/end-user price regulation in each EU member state is not undoubtedly justified,** because it is not conclusively proven that price regulation distorts the EU's internal energy market significantly, or hinders the extension/development of the effective internal energy market of the EU.



# Retail energy market price regulations of the United States

## Separation of the regulations of wholesale and retail energy markets (1)

- ❑ The Constitution allows federal regulation of utilities only where interstate commerce is involved. Accordingly, intrastate activities are subject to regulation by state regulatory commissions, while all states approve retail prices for their jurisdictional electric utilities
- ❑ In the energy market regulation of the United States of America, FERC (Federal Energy Regulatory Commission) exercises jurisdiction over transmissions between the wholesale energy markets and US states, but its jurisdiction is not related to retail energy markets
- ❑ The retail (to understand: residential) markets are regulated at State-level – with the cooperation of public utility commissions (PUC) –which may be significantly different in each state



# Retail energy market price regulations of the United States

## Separation of the regulations of wholesale and retail energy markets (2)

- ❑ The State Public Utility Regulatory Commissions determine the rules and prices of the retail energy markets. Their task is to ensure the population's access to safe and reliable public utility services at reasonable rates
- ❑ Pursuant to Order 888 of FERC published in 1996, State Commissions have jurisdiction over the distribution component of retail service, the generation component of retail service and the transmission component of bundled retail service

Σ:

in the hybrid electricity market system of the United States, the opening of retail markets and the pricing of retail markets are subject to the competence of the state commissions, i.e. these are the “home affairs” of the member states within the federal state.



# Retail energy market price regulations of the United States

## Retail market opening in the United States (1)

Currently, less than 1/3 of the US states have allowed Retail Choice on retail energy markets

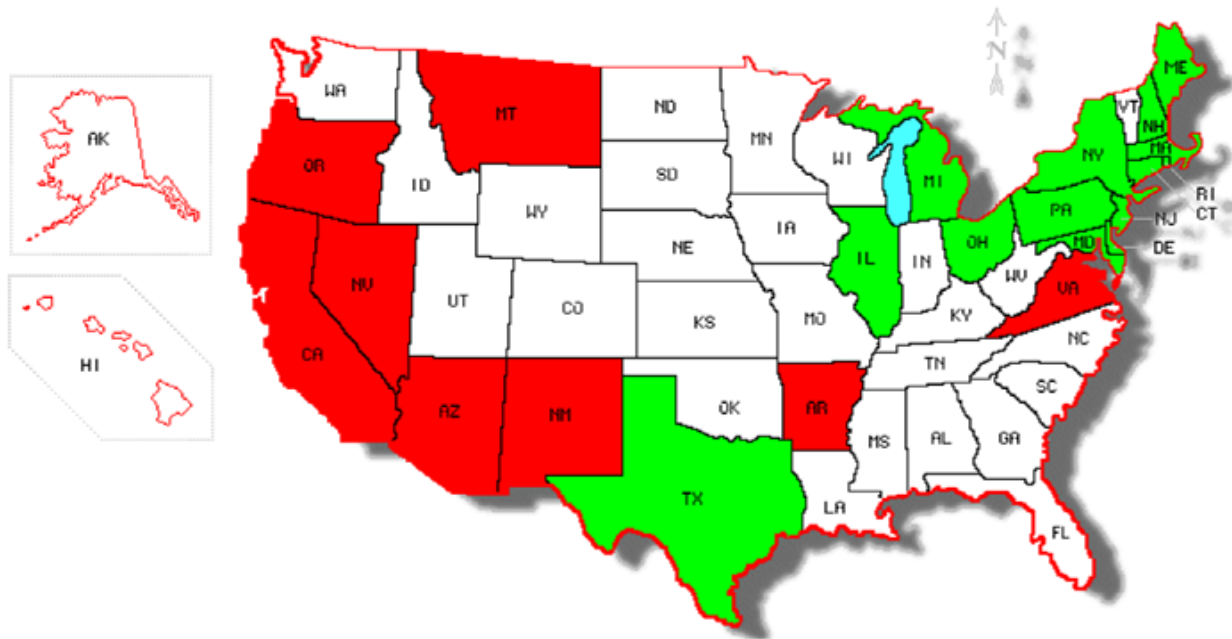


Figure: Retail Choice on retail energy markets (2015). **Green**: retail choice on retail energy markets (15). **Red**: suspended or withdrawn retail choice on retail energy markets (8). **White**: no retail choice has been introduced to the retail energy markets (28).

Source: Mathew J. Morey, Laurence D. Kirsch: RETAIL CHOICE IN ELECTRICITY: WHAT HAVE WE LEARNED IN 20 YEARS? February 11, 2016. Pg. 4.

# Retail energy market price regulations of the United States

## Retail market opening in the United States (2)

- Between 1996 and 2001, **22** states and the District of Columbia decided for utilities to prepare to open their retail markets through either legislative or regulatory action
- **The movement toward retail choice came to a sudden halt in 2001**, when the Western power crisis made it clear that there were fundamental problems with the manner in which electricity sector restructuring had been implemented
- As a reaction to the events, **several states suspended or revoked retail choice** on the retail energy markets (Nevada and California 2001; Montana and Oregon 2002; Arkansas and New-Mexico 2003; Arizona 2004; Virginia 2007)

Σ:

In the United States, only a minority of the member states allowed retail choice on the retail energy markets, and it occurred several times that certain member states suspended or revoked retail choice due to adverse circumstances or the lack of desired effects of market opening.



# Retail energy market price regulations of the United States

## Changes of energy rates in US states allowing and not allowing retail choice (1)

- between 1997 and 2015, price rates in retail choice states increased to a higher extent than in states prohibiting retail choice
- **the implementation of retail choice led to a higher price difference among the states allowing and not allowing retail choice, than in the period preceding the market opening:**

in 1997, the average retail electricity rates of the deregulated states were 2.8 cents higher than the rates of regulated states, while in the same comparison, the difference was even higher in 2015, the average rates of member states opening the markets were on average 3.4 cents higher than the rates of the states not allowing retail choice

Σ:

over the period of nearly twenty years – the opening of the retail energy markets did not reduce the average retail energy rates more effectively in the retail choice states than the regulated prices of the states not allowing retail choice.

Moreover, the average difference between the two price categories was higher in 2015 than prior to the opening of the retail markets





# Retail energy market price regulations of the United States

## Changes of energy rates in US states allowing and not allowing retail choice (2)

In the American market model, retail market opening has no added value (there is no extra profit in retail trade)

Retail market opening did not lead to price decrease

Competitive rates are born in wholesale trade

The retail market of the USA is not a price setter; it only reflects the difference of the wholesale rates

Therefore, the opening of the retail market has no price incentive effect

Large-scale wholesale market competition makes the market effective

There is no such profit margin on the (residential) retail markets of the USA that would cover the extra (administrative) costs of consumer switches



# Retail energy market price regulations of the United States

## Changes of electricity rates in the United States and in the European Union\* (1)

- *There is a significant difference in energy price rates between the European Union and the United States of America, in favour of the latter*
- *In 2005, the European average residential price rate was 75 percent higher than in the USA*
- *In the case of the USA, between 2005 and 2014 the annual average price increase was ~2 percent, which is in harmony with the rate of the average economic performance and inflation. Despite this, the European annual average energy rate increase is 5 percent for households, exceeding the region's annual economic growth or inflation in both cases*
- *To Europe's disadvantage, the difference between the levels of residential price rates has increased compared to 2005, and in 2014, an average European household had to pay two and half-fold (235%) compared to the Americans*

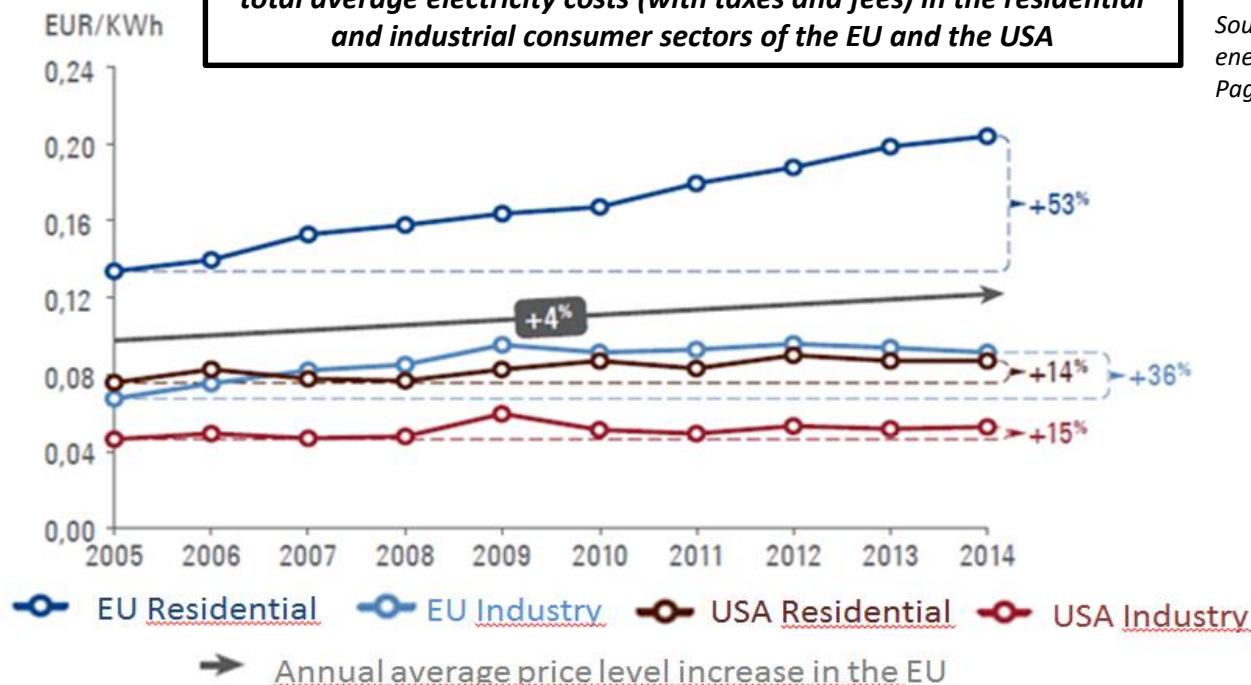
\*Source: Attila Szepesi: Európai dilemmák a globális energiaipari versenyben. KPMG Energetikai Évkönyv 2015. Page 12



# Retail energy market price regulations of the United States

## Changes of electricity rates in the United States and in the European Union (2)

**total average electricity costs (with taxes and fees) in the residential and industrial consumer sectors of the EU and the USA**



Source: Attila Szepesi: Európai dilemmák a globális energiaipari versenyben. KPMG Energetikai Évkönyv 2015. Page 12

Without the usual EU excuses (low US taxes, rich energy resources, no emission trading system, level of green levy) the European consumer prices would be closer to the low USA rates.

**European Commission** 2014 report also established that **energy rates notably deviated among the member states of the Union, and are sensibly higher in Europe than in its international commercial partners, especially in the United States of America.** On the other hand, the **residential average price of electricity (weighted EU-28 average rate) was EUR 208.7 /MWh in 2015 and contrary to the wholesale rate, the average rate increased on average by 3.2% per year between 2008 and 2015.**

Source: REPORT OF THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMISSION AND THE REGIONAL COMMISSIONS: Energy Prices and Costs in Europe. Brussels, 30.11.2016 COM(2016) 769 final. Pages 2-6

# Retail energy market price regulations of the United States

## Free (residential) retail market is not for free, not forever and not an absolute

Although wholesale and retail energy market openings started almost at the same time, after two decades, **evidence is scarce to prove that the retail opening would bring notable surplus in excess of the savings established by the wholesale market opening**

The complete restructuring of the markets was commenced in the states with high energy costs, because they expected the rates to decrease. **The efficiency increase achieved on the wholesale market is significant, but the profit of opening the retail markets is currently dwarfed by this**

Another highlight of the experiences: retail choice is only selected by large consumers **in the USA, while the majority of residential customers are supplied by the designated (universal) service provider or provider of last resort**

Costs of supplying low-consumption residential users is higher (administration, searching clients) than the profit realised by selling electricity itself

# Conclusion I.

## Free hands to EU Member States

The **United States of America** is still one of the largest economies of the world, its population and **welfare** can be compared roughly with the **consolidated data of the 28 member states of the European Union**. The relative welfare of the **USA** is higher than the average of the EU 28, its **retail energy markets are still more closed** – both in terms of market opening and price regulation – **than the requirements of the new European regulatory proposal of the European Commission (Clean Energy Package)**.

In the hybrid electricity market system of the United States, the opening of the retail market and the **setting of retail market prices are subject to the competence of the public utility regulatory commissions of the states**, i.e. these are the “home affairs” of the member states within the federal state.

In the United States, **only a minority of states allowed retail choice** on the retail energy markets, and it occurred several times that **certain states suspended or terminated retail choice** due to adverse circumstances or the lack of desired effects of market opening. Where the retail market is not opened or the opening is suspended, the retail energy rates remain regulated by the public utility regulatory commissions of the state.



## Conclusion II.

### A School of Choice: Dogmatism vs Pragmatism

It appears from the comparison of retail rates of the USA that – over the period of nearly 20 years –the **opening of the retail energy markets did not reduce the average retail energy price rates more effectively in retail choice states than the regulated prices of the states not allowing retail choice**, moreover, the average difference between the two price categories was higher in 2015 than prior to the opening of the retail markets.

Although wholesale and retail energy market openings started almost at the same time, after **two decades, evidence is scarce to prove that the retail opening would bring notable surplus in excess of the savings established by the wholesale market opening**. In the USA, it is clear that the benefits of market opening arise on the competitive wholesale market. All consumers benefit from the effects of the competitive production market and the decreasing wholesale prices.

The differences among the retail rates of the USA states are mainly explained by the regional differences of the wholesale rates. In the states with higher retail rates, wholesale rates are also higher. This is not a failure of opening the retail market, because the opening cannot decrease such differences.

## Conclusion III.

### Hybrid EU retail model - Liberty of choices

**Regulated retail energy markets cannot be considered as immediate obstacles of wholesale market integration in the EU.** It is a good example that in the USA, certain states have organised (integrated) wholesale markets but they do not allow retail choice on their retail markets.

US retail electricity market history shows: **it is a false economic argument that free competition leads to lower household price rates.**

Considering all this, **it is absolutely not proven that the abolition of regulated (residential/end-user) retail prices in the EU28 would bring the expected results based on economic assumptions.**

**Thank You for your kind attention!**

**Dr. Attila Nyikos**

Vice President for International Affairs

Hungarian Energy and Public Utility Regulatory Authority

[nkeht@mekh.hu](mailto:nkeht@mekh.hu)





# References

1. Federal Energy Regulatory Commission (FERC): Energy Primer – A Handbook of Energy Market Basics. November 2015.
2. Michael S Hindus, Robert a James, Joseph H Fagan and Becky M Bruner: Electricity, Oil and Gas Regulation in the United States. 2010. Pillsbury Winthrop Shaw Pittman LLP
3. Mathew J. Morey, Laurence D. Kirsch: RETAIL CHOICE IN ELECTRICITY: WHAT HAVE WE LEARNED IN 20 YEARS? February 11, 2016. Christensen Associates Energy Consulting, LLC 800 University Bay Drive, Suite 400 Madison, WI 53705-2299
4. Lazar, J. (2016). Electricity Regulation in the US: A Guide. Second Edition. Montpelier, VT: The Regulatory Assistance Project. Retrieved from <http://www.raponline.org/knowledge-center/electricityregulation-in-the-us-a-guide-2>
5. 2013 U.S. Average Electricity Retail Prices. February 2014. U.S. Energy Information Administration; Electric Power Monthly
6. Severin Borenstein and James Bushnell: The U.S. Electricity Industry after 20 Years of Restructuring. May 2015 (2014). Energy Institute at Haas working papers 252R
7. Energy Policies of IEA Countries. The United States. 2014 Review. OECD/IEA, 2014 International Energy Agency. 9 rue de la Fédération 75739 Paris Cedex 15, France
8. Retail Electric Rates in Deregulated and Regulated States: A Ten Year Comparison. American Public Power Association. March 2008, 1875 Connecticut Avenue, NW Washington, D.C. 20009-5715. 202/467-2900
9. Sam J. Ervin, IV Commissioner, North Carolina Utilities Commission Chairman, NARUC Committee on Electricity: The State of Energy Regulation in the United States. PPT presentation, downloaded on 27.02.2017 from the following url: <http://pubs.naruc.org/pub/538F9979-2354-D714-51EE-34D36131BC2C>
10. Retail Electric Rates in Deregulated and Regulated States: 2015 Update. American Public Power Association. April 2016, 2451 Crystal Dr. Arlington, VA 22202. 202.467.2900
11. Szepesi Attila: Európai dilemmák a globális energiaipari versenyben. KPMG Energetikai Évkönyv 2015. Energetikai és Közülemi Szektor. 2015. KPMG Tanácsadó Kft. 1134 Budapest, Váci út 31.
12. REPORT OF THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMISSION AND THE REGIONAL COMMISSIONS: Energy Prices and Costs in Europe. Brussels, 30.11.2016, COM(2016) 769 final
13. Charles J. Cicchetti, Jeffrey A. Dubin, Colin M. Long: The California Electricity Crisis: What, Why, and What's Next (2004). Kluwer Academic Publishers. Boston. ISBN: 978-1-4020-7692-3 (Print) 978-1-4020-8032-6 (Online)
14. Joskow, Paul L.: California's Electricity Crisis. 28 September 2001, Harward Energy Policy Group

