GRIDWISE® ALLIANCE

Advocating for a Smarter Grid

US-Japan Cooperation on Climate Technology and Innovation
CSIS
February 8, 2010

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ALLIANCE STRUCTURE

- Coalition rather than association
- Consensus-based, democratic
- Public interest rather than special interest
- Broad membership, holistic view of grid
- Technology neutral
- Complete projects in work groups

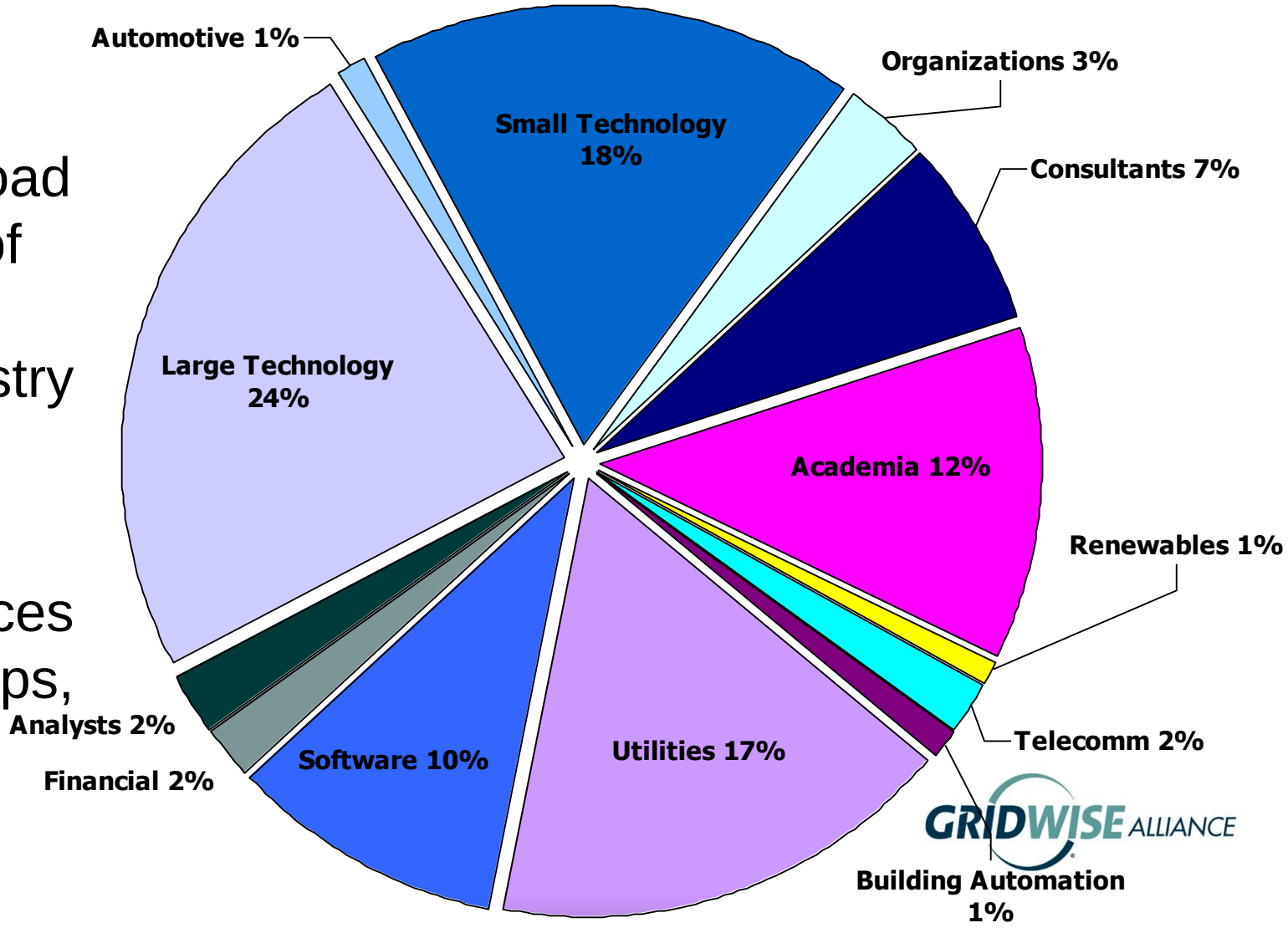
About the Alliance

GRIDWISE ALLIANCE

OUR CURRENT MEMBERSHIP

Over 120 members represent a broad cross-section of energy and electricity industry stakeholders

We also have strategic alliances with other groups, both nationally and globally



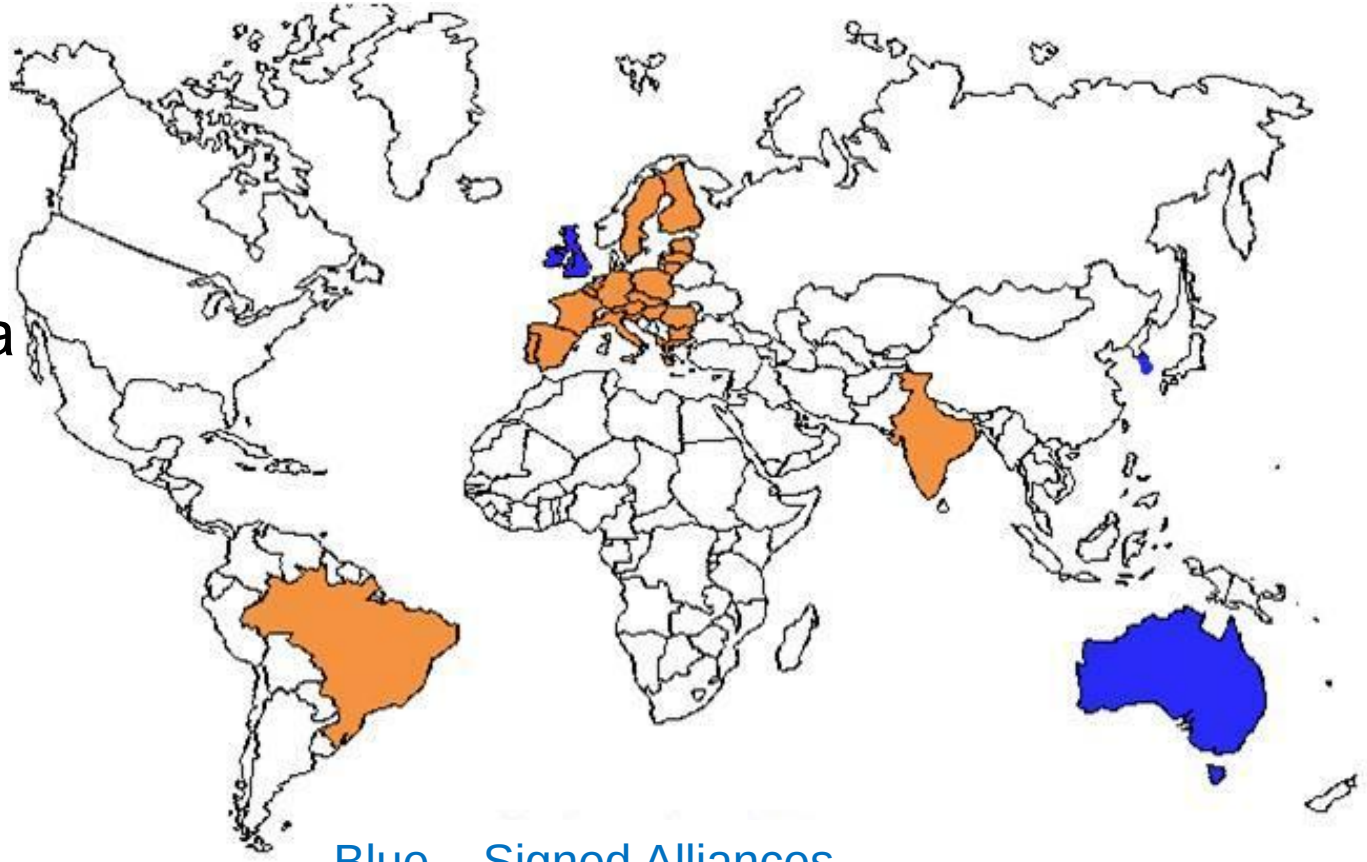
Strategic Alliances - Global

Signed:

- Korea Smart Grid Association
- Smart Grid Australia
- SmartGrid Ireland

In Discussion:

- Brazil
- China
- EU
- India



Blue – Signed Alliances

Orange – Alliances in Discussion

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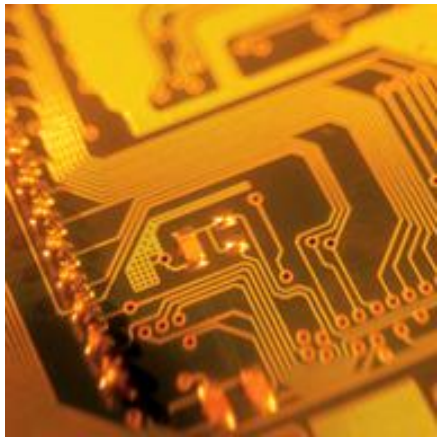
SMART GRID

- Smart grid is two-way communications and control from power plant bus bar to meter and load center
- All stakeholders on the grid should have more choices and be able to participate
- Smart grid is the means to an end, not an end unto itself
- Smart grid can look different depending on the goals and needs of the system
- Smart grid enables a more reliable, more flexible, more efficient, more secure, and cleaner electric grid

What is Smart Grid?



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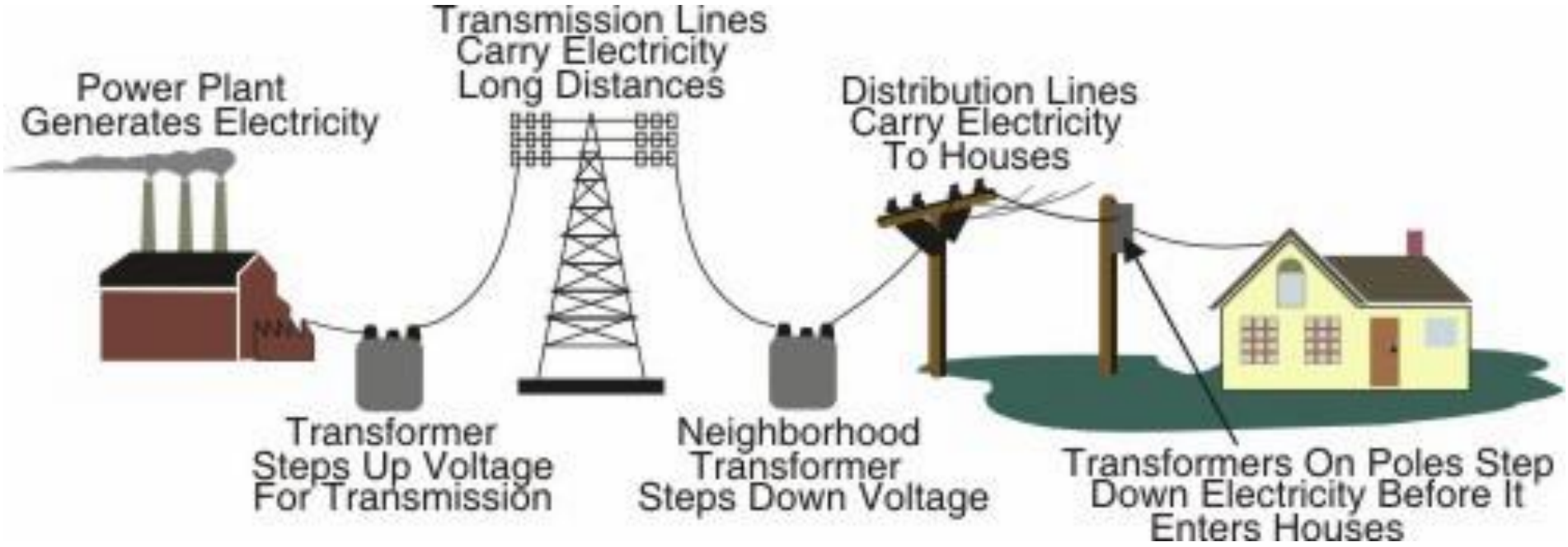
Today's Grid



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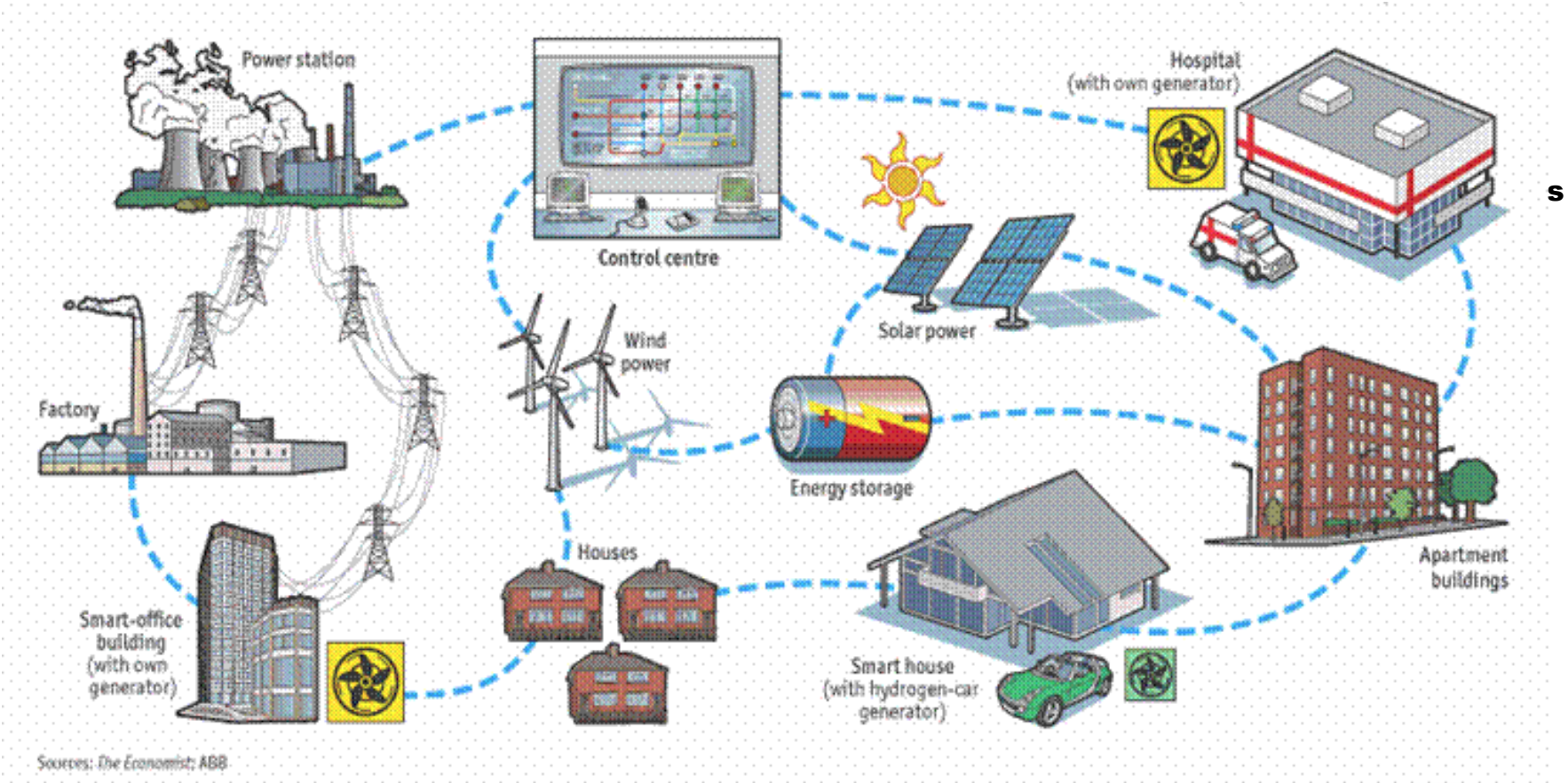
Tomorrow's Grid



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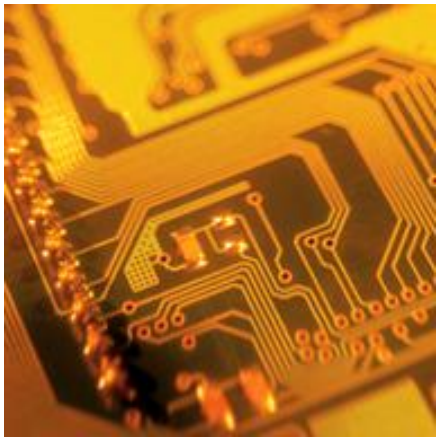
BENEFITS OF SMART GRID: ENVIRONMENT

Benefits of Smart Grid

P A smart grid could reduce carbon emissions and energy use of the electric sector by up to 12% by 2030 (PNNL 2010)

Mechanism	Electricity Sector Energy and Carbon Reductions*	
	Direct	Indirect
Conservation Effect of Demand Response Consumer Information	3%	-
Marketing/Outreach Synergy Between Demand Response and Efficiency Programs	-	0%
Measurement and Verification for Efficiency Programs	1%	< 0.5%
Smart Grid-Enabled Diagnostics in Residential and Small/Medium Commercial Buildings	3%	-
Conservation Voltage Reduction and Advanced Volt/VAr Control	2%	-
Load Shifting from Demand Response	< 0.1%	-
Support Additional Electric Vehicles (EVs) / Plug-In Hybrid Electric Vehicles (PHEVs)	3%	-
Reduced Need for Regulation and Reserves to Achieve 25% RPS of the electric sector: Solar Photovoltaic Integration and/or Wind Energy Integration:	< 0.1%	5%
Total Savings	**12%**	**6%**



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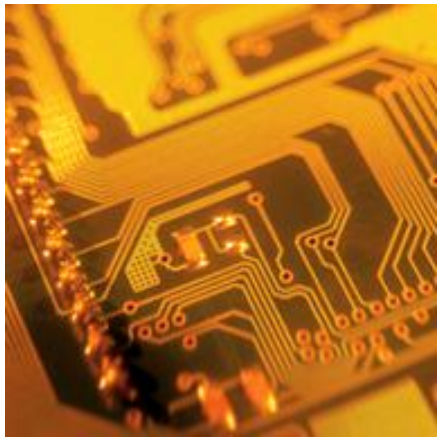
KEY POLICY MESSAGES

Legislative and Regulatory

- Ensuring effective spending of stimulus
- Embedding smart grid in all energy legislation
- Including smart grid as enabler in state and federal regulatory policies
- Conveying message of smart grid as a means to an end—not an end unto itself



Key Policy Messages

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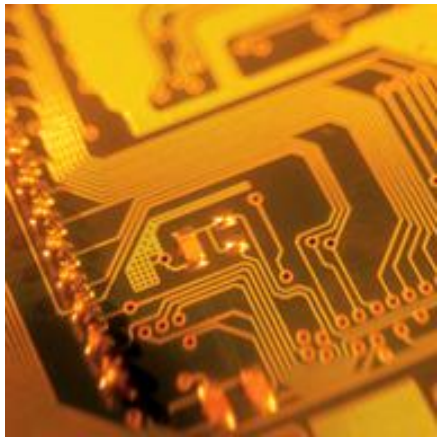
FEDERAL POLICY INITIATIVES

Regulatory

- Responded to Federal Energy Regulatory Commission smart grid docket, demand response memorandum
- Participate in National Institute of Standards and Technology process
- Review other proposals as impacted (NERC, NARUC, FCC, NASUCA)



Federal Policy Initiatives

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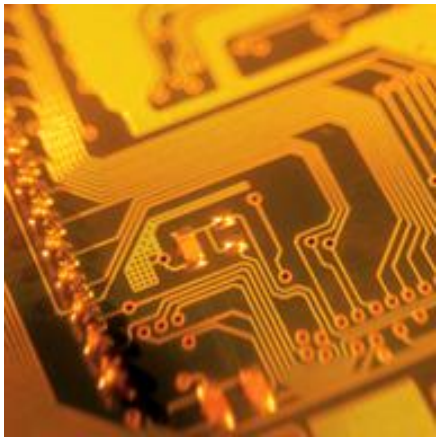
Visit Us Online!



www.gridwise.org

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