

ENERGY STORAGE

NICE, FRANCE 27 – 28 FEBRUARY 2013



EDF's Castillon Dam located in Demandolx, by Castellane, in the Alpes-de-Haute-Provence – Tuesday 26th February 2013

During the afternoon of Tuesday 26th February 2013 a limited number of conference attendees will have the opportunity to attend an exclusive site visit. There is no extra charge to attend the site visit. Please register your attendance for the site visit when booking for the conference.

KEY TOPICS

- .Global Market Forecasts & Assessment
- .Policy Developments & Impact on Energy Storage
- .Utility Scale Storage - TSO & DSO Strategy
- .Key Obstacle to Growth for Emerging Technologies
- .Realities of Energy Storage Business Models & Economics
- .Case Studies: Improving RES Penetration
- .Advances in Battery Storage
- .Techno-Economic Evaluation of Large Scale Applications

For registration contact Mohammed Ahsan
MAHSAN@ACIEU.NET +44 (0)207 981 2503
Discounts available for group bookings

Event Sponsors



For sponsorship and commercial opportunities contact:
Maureen Ignacio, +44 (0)20 7981 2508,
MIGNACIO@ACIEU.NET

ACI's 3rd Annual Energy Storage Summit will be taking place in Nice, France, on 27-28 February 2013. The two day conference will bring together key industry stakeholders from the utilities industry, TSOs, DNOs, EES owners, developers as well as manufacturers to conduct a thorough cost analysis and comparison of various EES systems and their roles in the business strategies & blueprints of grid operators.

The conference will have a heavy focus on case study examples of large scale RES projects across the globe, discussing how they overcame economic, political and technological challenges to improve penetration of intermittent RES.

The Key Areas of Discussion for the Event Will Be:

- Global Market Forecasts & Assessment
- Policy Developments & Impact on Energy Storage
- Utility Scale Storage – TSO & DSO Strategy
- Key Obstacle to Growth for Emerging Technologies
- Realities of Energy Storage Business Models & Economics
- Case Studies: Improving RES Penetration
- Advances in Battery Storage
- Techno-Economic Evaluation of Large Scale Applications

Why You Cannot Miss This Event

The two day conference will comprise a series of informative formal presentations from senior industry executives and experts, panel discussions encouraging information exchange between you and your peers and excellent networking opportunities allowing you to maximise the productivity of your two days at the event. Industry people will meet industry people to talk about numbers.

Who Will You Meet at This Event?

Leading power generating companies, TSOs, DNOs and utilities including: managers and directors of energy storage, power generation, R&D and new technologies, renewable strategy, innovations and strategic project managers as well as business development executives from technical service providers, consultants, regulators and academia.

Conference Agenda Committee

This year we have enlisted the help of a committee, consisting of various industry players, to influence the topics that drive the agenda, so it is flexible and entirely to the needs of the sector.

Meet the Committee:



Jillis Raadschelders, DNV KEMA



Anthony Price, Swanbarton



Erik Hauptmeier, RWE AG



Raquel Garde Aranguren, CENER



Michaël Salomon, Clean Horizon Consulting

Site Visit Details



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Castillon dam is located in Demandolx, by Castellane, in the Alpes-de-Haute-Provence department of France, on the River Verdon. It's the first upstream and the oldest of the 5 EDF dams built on the river. The reservoir behind the Castillon dam covers 500ha and contains 149 million cubic metres of water, 85 of them are used for agricultural use. The dam was built between 1929 and 1949. It's a concrete arch dam. It is 100 metres tall and 200 metres across, with a road running along the crest. The plant adjacent to the dam has a Hydroelectric power of 52MW (4 Francis turbines of 13MW) . Since 2009, the outer surface of the dam has markings that enable it to be used as the world's largest sundial.

Schedule of Site Visit:

12:00 – Registration for site visit at conference hotel in Nice – Clarion Grand Hôtel Aston

12:30 – Depart conference hotel

14:30 – Welcome address & company presentation by EDF, at their facilities in Demandolx

15:00 – Guided tour of the plant facilities including technical explanations

16:00 – Closing remarks & refreshments

16:30 – Depart Castillon Dam

18:30 – Arrive conference hotel in Nice

Opportunities to Meet Your Target Audience

For information on available sponsorship and commercial opportunities, please contact: Maureen Ignacio Tel: +44 (0)20 7981 2508 or Email: mignacio@acieu.net

Registration Is Simple

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+44 20 7981 2503

mahsan@acieu.net

<http://www.acius.net>

Postal Address:
ACI Europe, 5/13 Great Suffolk Street, London, SE1 0NS

DAY 1

Wednesday 27th February 2013

08:00	REGISTRATION & COFFEE
08:45	CHAIRMAN'S OPENING ADDRESS
	 Jillis Raadschelders Vice President EnergyStorage DNV KEMA
09:00	SESSION ONE
	Global Market Forecasts & Assessment
09:00	A Review of Energy Storage Technologies
	 Dr Graham Cooley CEO ITM Power
09:30	Presentation title to be confirmed
	Haike van de Vegte Consultant Renewables and Environment DNV KEMA
10:00	Panel Discussion
10:15	MORNING REFRESHMENTS
10:45	SESSION TWO
	Policy Developments & Impact on Energy Storage
10:45	Presentation title to be confirmed
	Elsa Venturini EU Affairs Adviser Bernard EnergyAdvocacy
11:15	Regulatory Considerations for Storage in Small and Isolated Power Systems in Spain
	<ul style="list-style-type: none">▪ Current regulatory framework for thermal and renewable power generation in Spanish isolated systems: cost-of-service vs. FIT/FIP regulation▪ Storage technology integration: possible mid-term benefits for small systems▪ Regulatory challenges: operational conditions and schemes for remuneration
	 Gabriella Németh Energy Analyst CNE - Comisión Nacional De Energía
11:45	Distributed Energy Storage for Regional Energy Governance

12:05

District Management and Local Smart Energy Policy: the Experience by the Department of Alpes de Haute-Provence

Thierry Gallet

Director of Information Systems

Conseil Général Des Alpes De Haute-Provence

12:15

Panel Discussion

12:35

LUNCH AND NETWORKING

13:35

SESSION THREE

Utility Scale Storage – TSO & DSO Strategy

13:35

Presentation title to be confirmed



Angelo Ferrante

Head of International Regulation

Terna

14:05

Lessons Learned From Energy Storage Cost-Benefit Studies and Demonstration Projects Performed By Enel

- Enel experimental activities
- Technical-economical analysis for Enel applications
- Canary Island STORE project – battery, flywheel, supercapacitor
- Ventotene Island – Conventional diesel generation optimization
- Lessons learned



Irene Fastelli

Project Manager, Responsible for Energy Storage Activities

ENEL Research

14:35

Panel Discussion

14:50

PANEL DISCUSSION

Key Obstacle to Growth for Emerging Technologies

If you would like to submit a topic or question for the panel please email: jboateng@acieu.net

Developing Energy Storage: Market Pull or Technology Push?

- Bringing business and technology together to overcome the obstacles to growth

14:50



Anthony Price

Director

Swanbarton

DAY ONE CONTINUED

15:05

Grid-Scale Renewable Energy Storage: Power-to-Gas

- What do you need to believe in for this new application to become a reality?



Filip Smeets
General Manager
Hydrogenics Europe

15:20

Barriers to Deployment of Energy Storage



Railii Alanen
Principal Scientist
Energy Storage Solutions
VTT Energy and P&P

15:35

Panel Discussion With Audience & Chair

16:00

AFTERNOON REFRESHMENTS

16:30

SESSION FOUR

Realities of Energy Storage Business Models & Economics

Business Opportunities for Storage: an Integrated Comparison of European Countries and the USA

16:30

The goal of this presentation is to provide a qualitative and quantitative overview of business opportunities for electricity storage in Europe as well as in the USA.

At the ACI event, Clean Horizon will for the first time unveil an aggregated table of opportunities per country and per application, providing a synthetic view of where storage makes most business sense, and for which use.

In the presentation, Clean Horizon will also introduce legislative aspects directly impacting storage business cases.



Michael Salomon
CEO
Clean Horizon

17:00

Technology Investments in the Energy Storage Sector: a VC Perspective

- Venture fund opportunities and pitfalls in the energy sector
- Market segmentation
- Drivers for and threats to a positive business case



Johan Reynaert
Investment Manager
Capricorn Venture Partners

17:30

Panel Discussion

17:45

CHAIRMAN'S SUMMATION

17:55

CLOSE OF DAY ONE

DAY 2

Thursday 28th February 2013

08:30

REGISTRATION & COFFEE

09:00

CHAIRMAN'S OPENING ADDRESS

09:15

SESSION FIVE

Case Studies: Improving RES Penetration

Decentralised Storage – Trends and Countertrends with Reference to Germany

- Necessity for decentralised storage and alternatives at distribution grid level
- Assessment from technical and economic perspective

09:15



Erik Hauptmeier
Corporate Research and
Development, Technologies -
Power Networks and Storage
RWE AG

09:45

Energy Storage and the Electric Grid of the Future

- The state-of-the-art of the transmission technology options enabling reliable integration of renewable energy sources to electric grids.
- The application of power electronics-based transmission technologies, large capacity battery energy storage and other control options in order to meet grid code requirements regarding reactive power and voltage controls as well as the dynamic and transient response to faults and events in the electric grid.



Dr Aty Edris
Senior Director
Quanta Technology, USA

10:15

Panel Discussion

10:30

MORNING REFRESHMENTS

11:00

SESSION SIX

Advances in Battery Storage

Integration of Redox Batteries in Microgrids: Challenges and Improvements

- Advantages of flow batteries
- Technology challenges
- Technology improvements

11:00



Raquel Garde
Head of Energy Storage,
Renewable Energies Grid
Integration Department,
CENER

11:30

Distributed Energy Storage Potential for the EU

DAY TWO CONTINUED

- Grid Security of Supply
- RES integration
- Peaksmoothing issue
- Potential for distributed storage options
- Advantages of distributed storage using battery systems
- Potential for the EU



Luigi Debarberis
Scientific Officer
EU Commission JRC -
Institute for Energy

12:00

Advancing Zinc-Air Battery Storage: Progress Towards Profitable Deployment in the U.S. and E.U.

- Technology update: scaling up from R&D to pilot manufacturing
- Delivering energy storage solutions, not batteries
- Understanding the business case for energy storage in the U.S. and the E.U.



Steve Hellman
President
Eos Energy Storage

12:30

Panel Questions & Answers

12:50

LUNCH AND NETWORKING

14:00

SESSION SEVEN

Techno-Economic Evaluation of Large Scale Applications

Isothermal CAES: Fuel-free, site-flexible compressed air energy storage for renewables integration and T&D substitution

14:00

- ICAES supports renewables integration by enhancing grid stability and firming supply, with the added advantage of site-anywhere flexibility.
- ICAES can extend the lifetime, enhance utilization, and substitute for new T&D infrastructure by providing scalable storage when and where needed.
- Over its 20-year operational life, ICAES has a disruptively low levelized cost of energy (LCOE).



Richard Brody
Vice President Business
Development
SustainX, Inc.

14:20

Presentation to be confirmed

14:40

Economic Analysis of Different Approaches to Storing Energy Based Upon their Fundamental Physics, Chemistry and Engineering

- Back of the envelope approach to costing different storage technologies to allow the ruling in or ruling out of potential candidates.
- The economic advantages of Pumped Heat are presented in comparison with alternative technologies.



James Macnaghten
CEO
Isentropic

15:00

Presentation title to be confirmed



Fred Hustig
Senior Project Manager
Suntrace GmbH

15:20

Highview's Liquid Air Energy Storage System – designing and costing a 20MW/80MWh unit

The presentation will focus on the practicalities of designing and putting together a large storage system with costs drawn from Highview's experience with its supply chain.



Gareth Brett
Chief Executive Officer
Highview Power Storage

15:40

Panel Questions & Answers

16:00

CHAIRMAN'S CLOSING REMARKS

16:10

CLOSE OF CONFERENCE & AFTERNOON REFRESHMENTS

FOR COMMERCIAL AND SPONSORSHIP OPPORTUNITIES


If you would like to raise your profile at the event and would be interested in our commercial packages, please contact:

Maureen Ignacio
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mignacio@acieu.net

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 mahsan@acieu.net

 <http://www.acius.net>

 **Postal Address:**
ACI Europe, 5/13 Great Suffolk Street, London, SE1 0NS

Registration Is Simple

Conference (Includes Documentation Packet)

27th & 28th February 2013

£1495.00

(ex VAT)

Documentation Packet Only

£420.00

Please Note.

Members and customers of all supporting organisations are entitled to a discount off their conference package.

For more information please call +44 (0) 207 981 2503.

Documentation Packet Available

We are selling Energy Storage 2013 papers at just £395 (+£25 P&P). Simply tick the box on the booking form, send it with payment and your copy will be on its way to you after the meeting.

This important manual will be a source of invaluable reference for the future.

With Thanks To Our Partners



Terms & Conditions

Payment

Payment must be received within five business days of returning the signed contract. After receiving payment a VAT receipt will be issued. If you do not receive a letter outlining details two weeks prior to the event, please contact the Conference Coordinator at ACI Europe Ltd.

Discounts are available for multiple/group bookings. Please call +44 (0)20 7981 2503 for more information.

Cancellations

Substitutions are welcome up to 24 hours prior to the event. Cancellations must be received in writing no less than 3 weeks prior to the start of the conference; a full credit voucher towards a future ACI conference will be issued. Any cancellation received less than 3 weeks prior to the start of the event shall be deemed to be a breach of this contract by client, and accordingly, no credits will be given. Cancellations must be received in writing by mail or fax three weeks before the conference. Thereafter the full conference fee is payable. If for any reason ACI Europe Ltd decides to amend, cancel or postpone this conference, the conference fee will not be refunded. Furthermore, ACI Europe Ltd will not be responsible for covering airfare, hotel or other costs incurred by registrants. In the event that ACI Europe Ltd cancel or postpone the event, ACI Europe Ltd reserves the right to transfer this booking to another conference to be held in the following twelve months, or to provide a credit of an equivalent amount to another conference within the following twelve months. The construction, validity and performance of this agreement shall be governed in all respects by the laws of England to the exclusive jurisdiction of whose courts the Parties hereby agree to submit.

Accommodation

Clarion Grand Hôtel Aston
12 Avenue Felix Faure
06000, Nice
Tel.: +33 (0)4 92 17 53 00
Website: www.hotel-aston.com/fr/index.php

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