

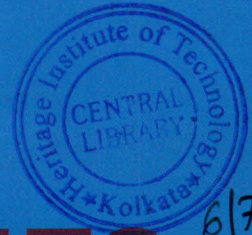
POWER ⁹⁵

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HYBRID POWER PLANTS



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IRA's Impact on Power Generation: Clock Is Ticking to Maximize New Tax Credits
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COVER FOCUS: HYBRID POWER

Hybrids Combine Technologies to Enhance Electricity Production 18

Hybrid power plants—those generation facilities combining two or more technologies to produce electricity—are growing rapidly as utilities and power producers combine renewable energy resources with energy storage, as well as with diesel- and natural gas-fueled generators.

FEATURES:

SOLAR POWER

Tracker Configurations for Bifacial Modules
Support Distributed Generation Sites 21

Tracker selection is critical to the success of a distributed solar generation project. The use of larger and heavier modules, and the adoption of bifacial technology, may require operators to think differently about the design of their systems.

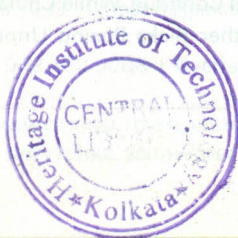
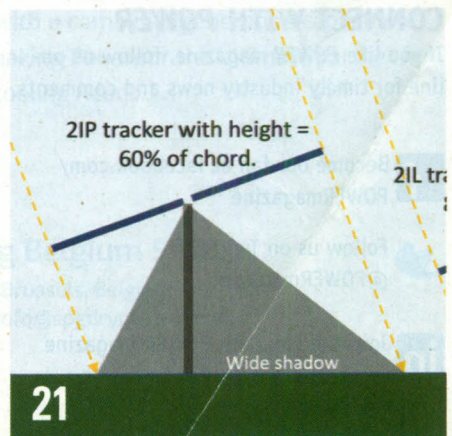
COAL

Water Quality Management and Control—Managing the Second-Largest Waste Material in the U.S. 26

Managing coal ash, particularly when it comes to protecting bodies of water near coal-fired power plants, is critical for facility operators and requires strong water quality management, monitoring, and control systems.

ON THE COVER


The Townsite Solar + Storage facility is a hybrid power plant in Boulder City, Nevada, near Las Vegas. The plant features 232 MW of solar power generation capacity, along with a 360-MWh energy storage system. *Courtesy: Rosendin*







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CYBERSECURITY

Cybersecurity Requires Understanding Humans as

Much as Technology—Here's How

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A strong cybersecurity strategy requires more than just a set of tools to keep information safe. Understanding how the people in your organization view cybersecurity, and their knowledge of steps to take to protect data, is every bit as important as deploying the right software.

HEAT TRANSFER

Insulation Pays Off: The Business Case for Insulation Energy Appraisals

30

The insulation industry has a role to play in helping industrial facilities, including power generation plants, operate more effectively. The insulation sector is focused on conserving energy and utilizing it more efficiently, slowing heat transfer and reducing carbon emissions.

TRANSMISSION & DISTRIBUTION

How to Reduce Risks at Distribution Pole Storage Sites

32

Georgia Power has a new design for facilities where the utility stores its powerline poles, emphasizing a "safety first" approach to maintaining equipment that's critical for its transmission and distribution network.

REMOTE MONITORING

How Monitoring and Diagnostics Centers Benefit the Power Industry

33

Remote monitoring of power plants has come a long way over the past 25 years. GE's power generation monitoring and diagnostics center began small but it now monitors about 1,000 plants around the world, providing a wide range of benefits for the company's customers.

POWER AWARDS

Large Hydro Station Wins POWER's Highest Honor,

21 Additional Outstanding Projects Recognized in 2022

34

Power plants from across the generation spectrum were honored this year as recipients of a *POWER* Top Plant award, with a massive hydropower project in China recognized as Plant of the Year. Nearly two dozen facilities, both thermal and renewable, were highlighted for their innovation and other notable achievements.

COMMENTARY

Exploring Innovative Solutions for Nuclear Waste

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By Patrick White, PhD, Nuclear Innovation Alliance

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