

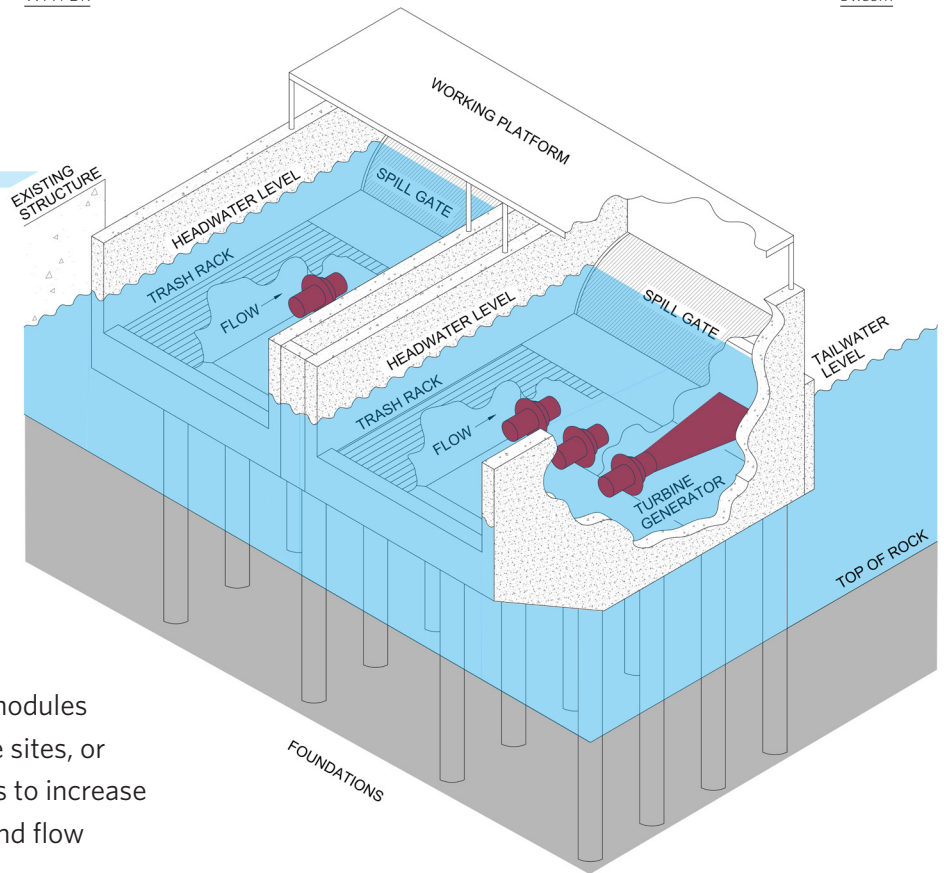
# Modular Hydropower System

**Bypassing the barriers to low-head hydropower development**



Introducing a breakthrough powerhouse system that makes low-head hydropower development economically feasible. The hydropower-in-a-box solution features a modular design, a unique foundation approach and readily available turbine generator technology. It's a scalable, turnkey solution that bypasses the cost and schedule barriers of traditional hydropower developments letting owners and operators tap the electric potential of non-powered dams, navigational dams, undeveloped stream reaches, unused locks, and gated flood-control structures.

Engineered by Black & Veatch, a global leader in hydropower and hydraulic structures, and developed in association with Ames Construction, this patent-pending modular approach unlocks low-head hydropower development.



## Modular Design

- Scalability – Standardized modules may be installed at multiple sites, or combined at individual sites to increase output for the given head and flow
- Off-Site Production – Provides flexibility in construction technology, construction timing, materials specifications, and use of existing infrastructure

## Available Technology

Uses turbine generator technology currently on the market.

## Innovative Installation

- Foundation Flexibility – May be set on piles as well as rock, concrete and other surfaces
- Shipping Flexibility – May be floated to low-head sites
- Cofferdam Elimination – May be installed without the need for a cofferdam

## Major Cost Savings

- Eliminates the need for cofferdams to divert water flow
- Eliminates the need for large volumes of concrete to anchor the powerhouse against hydraulic forces
- Reduces field construction from years to months

## Low Impact on Existing Facilities

- Minimal impact on flood passage capacities
- Does not negatively impact stability of existing dam
- May not interfere with the normal operation of locks for navigational purposes
- Can accommodate debris and fish passage

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