

Dam: **Nam Theun 1**

Country **Laos**

River **Nam Kading, aka Nam Theun**

18°21'17.77"N 104°8'51.59"E

18.355 104.147667

Owner/Client **Nam Theun 1 Power Company**

Designer/Engineer **AFRY Switzerland Ltd. (formerly Pöyry Energy Ltd.)**

Contractor **Initially CMC Ravenna, Italian Thai Development and Song Da Corporation J.V.; replaced by SinoHydro (Construction Bureau N°3)**

Purpose (code) **H**

Site start **01.08.2015**

RCC start **15.01.2019**

RCC completion **25.02.2022**

Site completion **12.08.2022**

Height (m) **187**

Length (m) **772**

Volume of RCC (m³x10³) **4141213**

Total volume (m³x10³) **4320**

Reservoir capacity (m³x10⁶) **3009**

Upstream slope **Unknown**

Forming of upstream face (code) **Unknown**

Downstream slope **Unknown**

Forming of downstream face (code) **(3') ***

Spillway slope **Unknown**

Forming of spillway face (code) **Unknown**

Depth of layers (mm) **300**

Depth of lifts (mm) **3000 & 9000**

Cement content (kg/m³) **100
130**

Pozzolan content (kg/m³) **130
120**

Code for pozzolan **(F)**

RCCDAM Unique Serial No. **RCCDAM0747**

Under Construction



RCCDAM0747UC

Guide to Abbreviations

Purpose

- E Environmental
- F Flood control
- G Groundwater recharge
- H Flood control
- I Irrigation
- N Navigation
- P Pollution control
- R Recreation
- W Water supply

Facing method

- (1) Traditional concrete against formwork
- (2) Traditional concrete against formwork with external geomembrane
- (3) RCC against formwork
- (4) RCC against formwork with external geomembrane
- (5) Traditional concrete against precast concrete panels
- (6) Traditional concrete against precast concrete panels with geomembrane
- (7) RCC against precast concrete panels
- (8) RCC against precast concrete panels with geomembrane
- (9) RCC against precast concrete panels with hot poured membrane
- (10) RCC against precast concrete blocks
- (11) Reinforced conventional concrete cast before RCC placement
- (12) Reinforced conventional concrete cast after RCC placement
- (13) Reinforced concrete cast against precast units or slip-formed facing elements
- (14) Slip-formed/extruded facing elements
- (15) RCC supported by fill shoulders
- (16) Mechanically compacted unformed face of RCC
- (17) Unformed face of RCC
 - ' GEVR/GE-RCC
 - * Stepped face

Pozzolans

- (-) No Pozzolan Used
- (C) High-lime flyash (ASTM Class C)
- (F) Low-lime flyash (ASTM Class F)
- (M) Milled sand
- (N) Natural pozzolan (ASTM Class N)
- (R) ROLAC (mixture of flyash and slag with or without limestone fines)
- (S) Ground-granulated blast-furnace slag
- (L) Mixture of GGBFS and limestone fines