

August 29, 1962

J. C. Sanders

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B-1	Install and check-out	Start-up hot bleed					Pump maps Mark IX Pump	Start-up cycle variations					Start-up new reflector					Boost pump perf. Aerojet Pump					Start with syst. using boost pump							
B-3	Construction					Tank heat and cavitation 46,000 gallon tank					Pump Map Aerojet Pump					Parallel pump operation					Advanced reactor with parallel pumps					Expansion for 15,000 mw				

IF FUNDS FOR B-3 ARE DELAYED TO SEPTEMBER, 1963, THEN THE SCHEDULES BECOME:

B-1	Install and construct	Start-up hot bleed					Pump maps Mark IX Pump	Start-up cycle variations					Start-up new reflector					Boost pump perf.					Start with syst. using boost pump				
B-3	Construction					Tank heating and cavitation 46,000 gallon tank					Pump maps Aerojet Pump					Parallel Pumps											

- Notes:
1. Start-up work includes chill down assessment and specification on tank shut-off valve manipulation.
 2. Tank heating, cavitation and tank pressurisation are studied together.
 3. Pump mapping includes cavitation without simulated nuclear heat.
 4. Start-up cycle variations include modes for diluting hot gas and tests of heated bleed cycles.
 5. Schedule assumes that main emphasis of NERVA contractor will be switched to hot bleed cycle.
 6. Expansion for 15,000 mw includes larger tank, new engines, and advanced pumping systems.
 7. B Notes delay between the two schedules for the same work.

SEP 6 1962

From Lewis
 To **NASA - Headquarters**
 Apts: **F. G. Schwenk (NOP)**
 Subject: **Transmittal of Tentative Work Schedules for B-1 and B-3
 Nuclear Rocket Stands**

Reference:

1. Please take the action indicated below:

- (A) Advise status.
- (B) For your information, proper action, and files.
- (C) For reply by your office.
- (D) Forward (on loan) (for our files).
- (E) Translate for our files.
- xx (F) There ~~(is)~~ (are) transmitted herewith the following:
- (G) The following visited us on dates given.
- (H) Hold for further information.
- (I) Copy of this letter enclosed with shipment.
- (J) Advise whether order will be placed soon.
- (K) Return catalogs and literature furnished by low bidder.
- (L) Return samples submitted with letter of award.
- (M) Send catalog and price list applying to general schedule.

Two (2) copies of subject schedule.

E. J. MANGANIELLO
E. J. Manganiello
Deputy Director

HHE HHS:kjw
 DSO
 BTL

Copies to: NASA Hqs. (NOP)
 Files
 Deputy Director
 AD&E Division
 NP Branch

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