



**RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:**

Paul Lacoursiere
11 Laurier St. / 11, rue Laurier
Place du Portage
Phase III 8C2-103A
Gatineau
Québec
K1A 0S5

**SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address
Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution
Electronics, Simulators and Defence Systems Div.
/Division des systèmes électroniques et des systèmes de
simulation et de défense
11 Laurier St. / 11, rue Laurier
8C2, Place du Portage
Gatineau
Québec
K1A 0S5

Title - Sujet Tactical Power System (TPS)	
Solicitation No. - N° de l'invitation W8476-206276/B	Amendment No. - N° modif. 009
Client Reference No. - N° de référence du client W8476-206276	Date 2021-09-09
GETS Reference No. - N° de référence de SEAG PW-\$\$QF-121-27522	
File No. - N° de dossier 125qf.W8476-206276	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM Eastern Standard Time EST on - le 2021-12-31 Heure Normale du l'Est HNE	
F.O.B. - F.A.B. Specified Herein - Précisé dans les présentes Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input checked="" type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Paul Lacoursiere, Paul	Buyer Id - Id de l'acheteur 125qf
Telephone No. - N° de téléphone (343) 551-1529 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

TACTICAL POWER SYSTEM (TPS)
Letter of Interest (LOI)
W8476-206276

Amendment #9 is raised to provide the power point presentation from the Industry One on One meetings.

Please contact:

Paul Lacoursiere
Supply Team Lead
Navigation, Sonar and Radar Systems Division
Public Services and Procurement Canada
Paul.Lacoursiere@tpsgc-pwgsc.gc.ca , Cell 343-551-1529



Serving
GOVERNMENT,
Serving
CANADIANS.

Respect ♦ Integrity ♦ Excellence ♦ Leadership

Tactical Power System (TPS) Project: One on One Presentations

July 2021



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

 **Canada**

Agenda

- 1) Opening remarks /Introduction of GoC personnel - PSPC
- 2) Operational Considerations – PD
- 3) Project Management Considerations– PM
- 4) Technical Considerations - TA
- 5) Economic Benefits - ISED
- 6) Industry led Presentation
- 7) Q&A
- 8) Closing remarks - PSPC



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada

Government of Canada Team

PSPC

Contracting Authority (CA) – **Paul Lacoursiere**

DND

- Project Director (PD)- **Maj Don Parker**
- Project Manager (PM) - **David Rutkay**
- Systems Engineer - **Kamal El Salfiti**
- Equipment Manager Team (EMT)- **MWO Greg Telford**
- Procurement and Finance Manager - **Joe Martines**

ISED

- Industrial and Technological Benefits (ITB) – **Eric Macfarlane**

- **Fairness Monitor (FM) Ted Pender**



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



PSPC Comments

- Who we are
- What we do
- Comments on Fairness monitor.



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

The word "Canada" in a black serif font, with a small red maple leaf logo above the letter 'a'.

Canada

Operational Considerations

Capability Deficiency

- There are over 50 fleets of nearly 3000 generators (<60kW) of varying power within the CAF.
- Current in-service electrical generation equipment is based on old technology, is not interoperable, and is increasingly costly to maintain.
- Many units purchase or rent Commercial off the Shelf (COTS) equipment that cannot be sustained by National Procurement and the CAF supply system.
- Current generators cannot achieve previous Defence Energy and Environment Strategy (DEES) to “Reduce petroleum-generated electrical energy consumption in deployed camps by 50% by 2030” or 2021 target of “85% energy efficiency in major deployed camps by 2023”.

Tactical Scenarios

Domestic (Disaster Relief)

- Aid to Civil Power (e.g. Refugees in Quebec)
- Fires
- Flooding
- Earthquakes



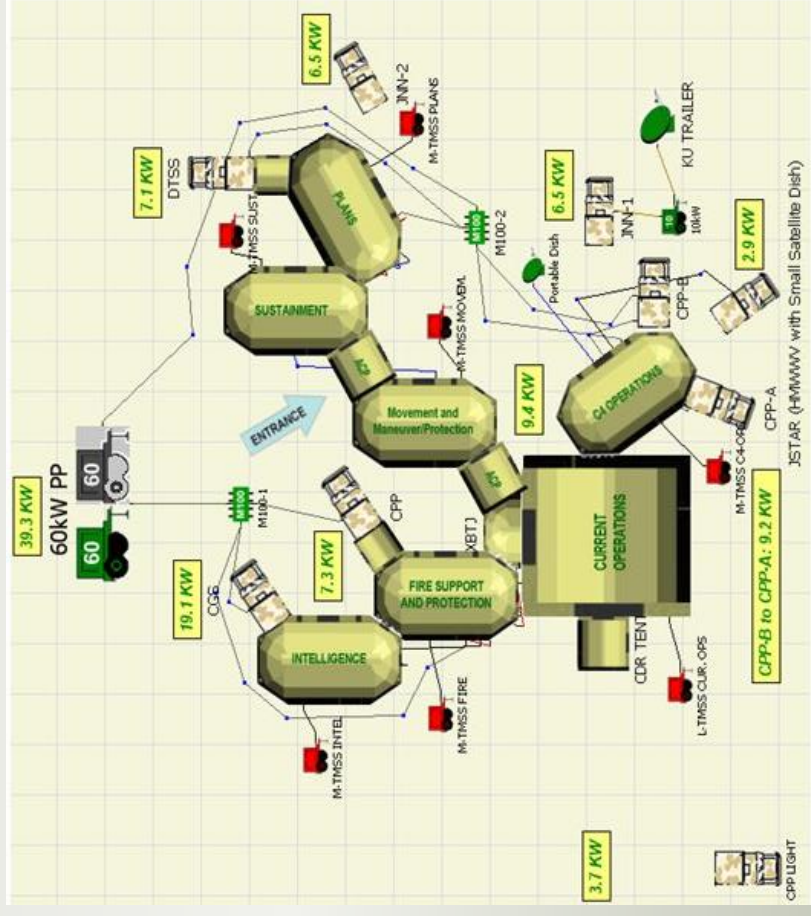
A woman walks past a downed hydro pylon near St-Constant, Que. just south of Montreal, after one of the worst ice

Expeditionary

- Mobile Combat Operations
- Humanitarian/Disaster Relief



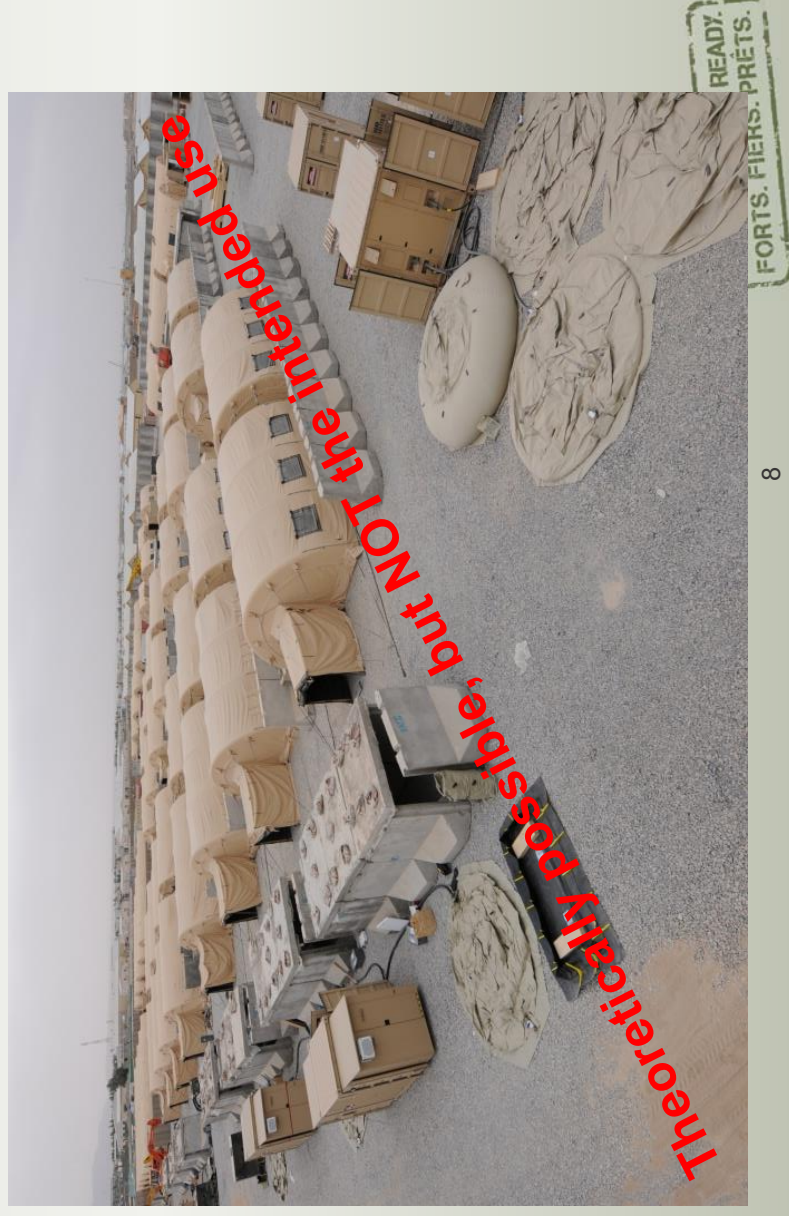
ARMÉE
CANADIENNE



STRONG. PROUD. READY.
FORTS. FIERS. PRÊTS.

Expeditionary

- (Potentially) Austere FOBs - No fixed infrastructure/few amenities)
- NOT Camps



Training

- Local/low Level Training
- Ex MAPLE RESOLVE
- International Training



CANADIAN
ARMY



ARMÉE
CANADIENNE



ING. PROUD. READY.
S. FIER. PRÊTS.

Requirement

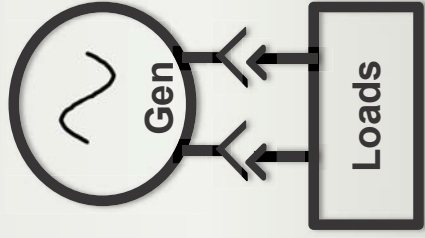
- The CAF requires an efficient, modernized electrical power generation and distribution system for tactically deployed forces on operations and training.
 - “Replace the general purpose generators <60 kW with something better”
- Approved Option: New generators plus energy storage and micro-grids
- Business Outcomes:
 - Increased reliability;
 - Increased efficiency;
 - Reduced environmental impact; and
 - Increased sustainability.

Scope

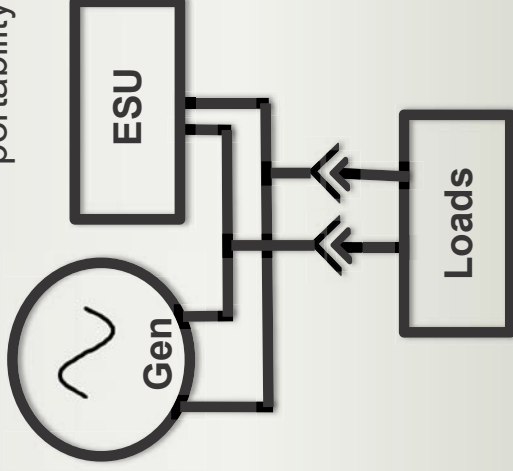
- Various generators (up to 60kW). Two 'divisions' (small/large)
- Energy Storage Unit (ESU) devices (small/large)
- Distribution systems (large)
- Power Management Modules/software (large)
- Integrated Logistics Support (ILS)
- In Service Support (ISS)
- Minor Construction in Support of Equipment if required (not discussed further)
- Note: Metrics of existing loads/use are not strong

Small (120V, 1ph, 60Hz) NEMA 5-15 or 5-20 user receptacle

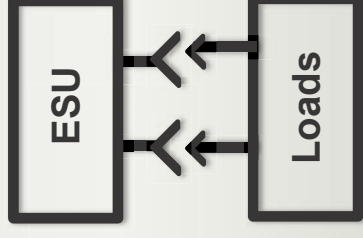
The small ESU must be a physically separate component to allow sharing between users and portability



Most Common
Traditional use.



Some Systems Power
during refuel/maint/etc +
absorb surges for limited
periods.

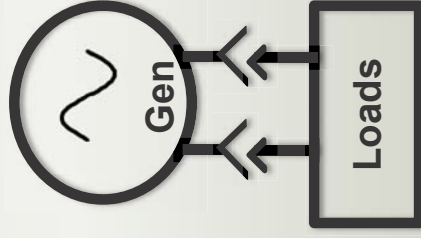


Infrequent Use

Genset cannot be (or is
not) used. Charged
from genset or shore
power earlier.

Large (pg 1/2)

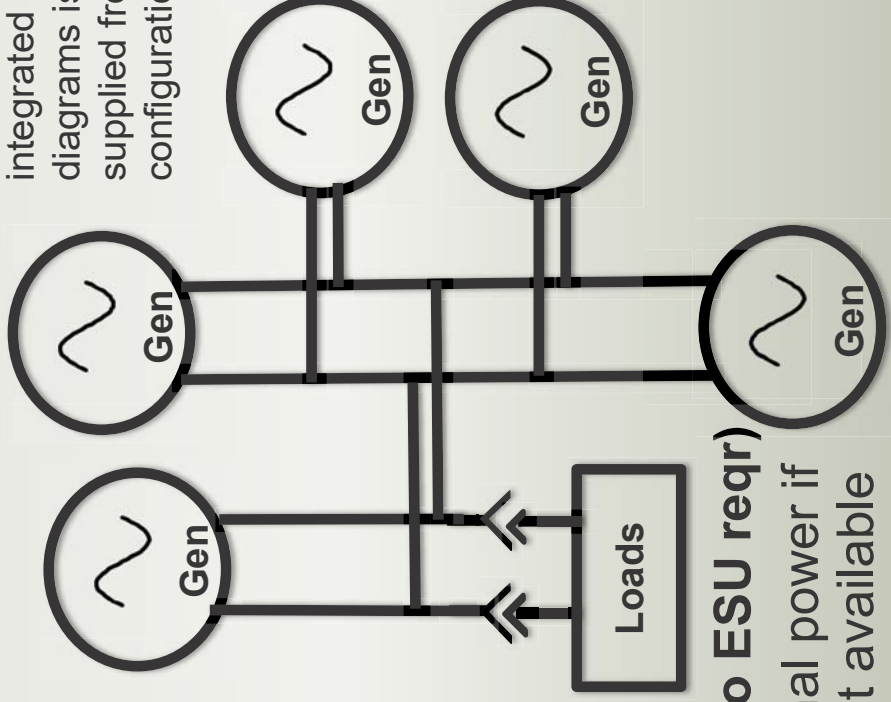
(120/208V, 3ph, 60Hz plus 220/380V, 3ph, 50Hz) pin/sleeve connectors



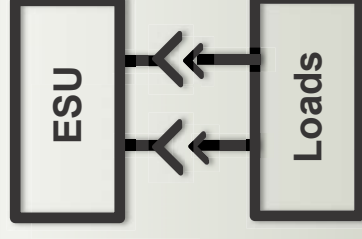
Some Systems
(traditional)



The large ESU may be stand-alone or integrated into a core genset. Intent of diagrams is to depict where power is supplied from, not dictate physical configuration.



Synch (no ESU reqr)
Additional power if
ESU not available

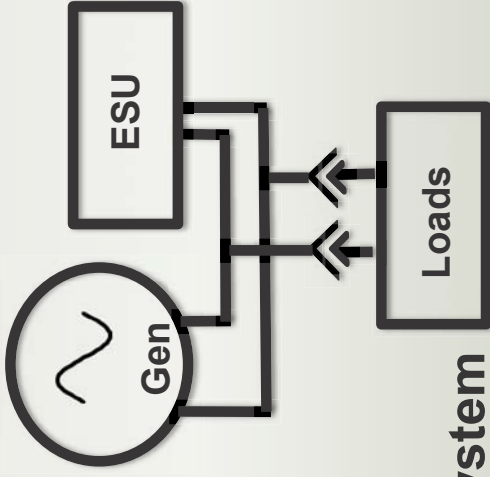


Rare, but possible



Large (pg 2/2)

(120/208V, 3ph, 60Hz plus 220/380V, 3ph, 50Hz) pin/sleeve connectors

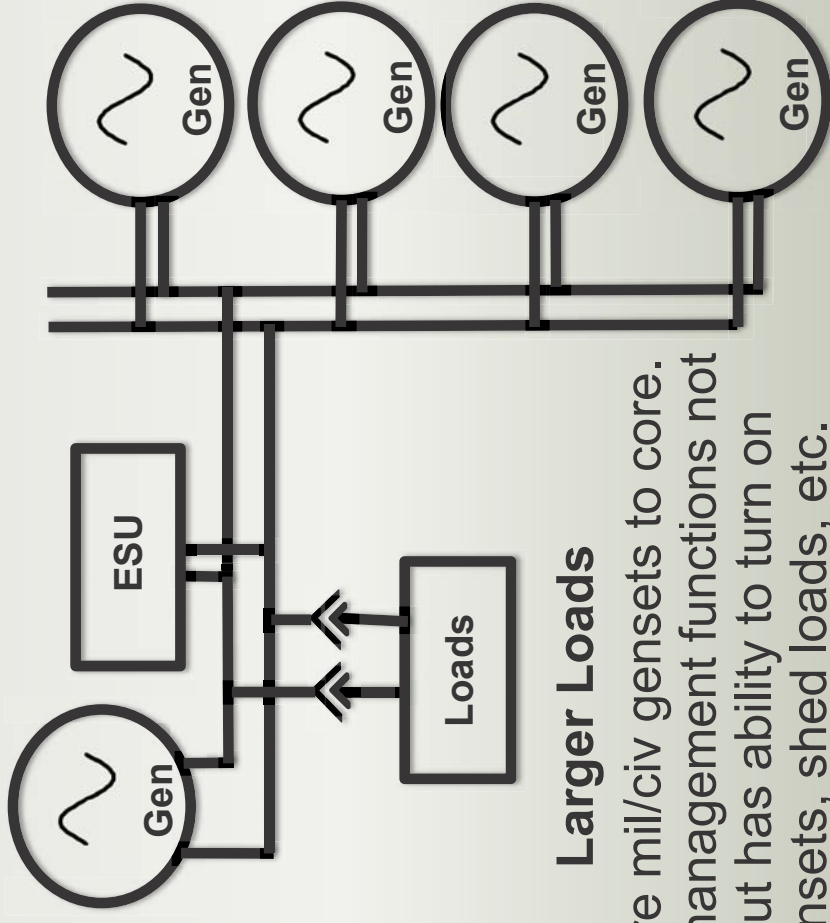


Core System

Power during refuel/maint + absorb surges for limited periods + allow genset to cycle. Mid-size genset.

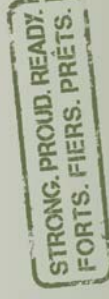


ARMÉE
CANADIENNE



Larger Loads

Add more mil/civ gensets to core. Power management functions not shown but has ability to turn on addn gensets, shed loads, etc.





Project Manager's Comments

Fixed Budget Approach (FBA)

- Aim is to Optimize the mix of Generators & Energy Storage Units (ESUs) to provide best overall capability
- One reason for the Extensive equipment listed in the recent price survey
- The requested pricing information is critical to provide confidence in the analysis of the fielding options

Request For Information (RFI)

- Next significant information release by the project
- Will be based upon the approved Fielding Option
- Pricing information will be required for cost validation s part of the Project Approval Process



Project Manager's Comments (cont'd)

In-Service Support (ISS)

- Currently conducting Option Analysis as part of the Sustainment Business Case Analysis (SBCA)
- Based on initial analysis, Commercial participation may include:
 - Technical investigations when tasked
 - Design changes when tasked
 - 4th Line Repair & Overhaul
 - Obsolescence Management
 - 1st/2nd line repair option in remote/isolated locations
 - ESU maintenance could go from 1st to 4th line directly
- Final conclusions will be reflected in the RFI



Technical Authority's Comments

- Request For Information (RFI)
- Next significant information release by the project:
 - Annex A - Acquisition SOW;
 - Appendix AA to Annex A – Requirement Verification Matrix (RVM);
 - Appendix AB to Annex A – Contract Data Requirement List (CDRL);
 - Appendix AC to Annex A – Data Item Description (DID);
 - Appendix AD to Annex A – Engineering Drawing and Data List;
 - Appendix AE to Annex A – Technical Publications; and
 - Appendix AF to Annex A – Fielding Plan.
- Annex I – In-Service Support (ISS) SOW;



Technical Authority's Comments Continued

- Next significant information release by the project:
 - Annex B – Bid Evaluation Plan;
 - Appendix BA to Annex B – Technical Bid Evaluation; and
 - Appendix BB to Annex B – Third Party Verification Plan.



Economic Benefits

Eric Macfarlane
ITB Branch (ISED)



Economic Benefits

- If a National Security Exception (NSE) is invoked, Canada intends to apply the Industrial and Technological Benefits (ITB) Policy, including Value Proposition (VP), to leverage economic benefits.
- The ITB-VP is rated and weighted during the evaluation and requires the winning contractor to undertake economic activities in Canada equal to the contract price (either project-related or indirect undertakings).
- Feedback from industry will help inform the ITB-VP approach to ensure it maximizes opportunities and aligns with TPS requirements.



Questions to Industry on ITB-VP

- To what extent can TPS project-related activities (Direct Work) be undertaken in Canada for both the acquisition and sustainment?
- The ITB-VP normally includes a mandatory minimum of 15% of contract price for work with Small and Medium Businesses (SMBs) for either direct or unrelated undertakings. Are there opportunities to incentivize work with SMBs beyond 15% of contract price?
- Canada expects that there are opportunities to leverage this procurement to build capacity in clean technologies. Are there other sectors or Key Industrial Capabilities (KICs)* that relate to this procurement that the ITB-VP should incentivize investments in?
- What R&D opportunities should Canada incentivize that are linked to the TPS technical requirements or in related defence and commercial sectors?

*

The 16 KICs identified by Canada and their definitions are provided at this link: https://www.ic.gc.ca/eic/site/086.nsf/eng/h_00175.html



Closing Remarks

